DIGITAL CCI EXCHANGE: PARADIGM, CONCEPT AND CONSTRUCTION

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ABSTRACT

As an emerging field, cultural and creative industries (CCI) still do not have a generally accepted definition, monitoring system, or protection of the creative output. Since products and services in this domain of operations are highly specific, a research question has been posed, namely, whether an established system such as the exchange business in its digital version (DE) can be applied in culture and creative industries

The authors propose a digital platform aimed at intellectual property rights protection and preventing the dominance and omnipresence of lobbies. Another goal is to generate large amounts of relevant statistical data required for monitoring the development of these industries, their scope and impact on the economy as a whole.
1. INTRODUCTION

The digital world is not static and is continuing to experience very rapid development, where we can describe digital technologies as technologies that allow information and processes to be created and stored in digital form, with the possibility of distribution over electronic networks (Poole and Le-Phat, 2011). Following these definitions, the main assumption of this paper is underlying how global age provides a new form of transforming most of the existing market, including markets of creative content which leads to the possibilities of establishing a digital exchange for the trade of goods of cultural and creative industries (DE-CCI). This paper presents an overview of theorizing stock exchange (DE-CCI), its determinants, paradigm, concepts and proposal structure. Paradigm DE-CCI includes the establishment of a digital market organized according to the specifics of cultural and creative industries, ie according to contents of cultural and creative industries. The main component of this digital market would be open (and direct) marketing communication between authors of cultural and creative content and manufacturers of cultural and creative products.

Structure DE-CCI stock market implies elaboration of suggestions and concept designs of future digital exchange of cultural and creative content. It is a kind of prototype that will during the actual implementation experience adjustments and improvements of suggested structural solutions presented in this paper.

The impact of new technologies in the cultural and creative industry opens the problem of access that implies questions of intellectual property rights of which are the most common copyright, patents, trademarks and designs, which is justified by reflection on the issue of public domain and the availability of (cultural) exchange as a key dimension of the problem (Švob-Djokic et. al., 2008, Primorac, 2012)

The construction of DE-CCI on the cultural and creative market would allow direct market communication (and competition) between the author (content) - manufacturer (product) - financier (content and / or products), while avoiding intermediaries and lobbyists. DE-CCI would faced all stakeholders (and phases) of the production process on the way of author’s ideas (content) to its transformation into a product. At the same time, such a construction of digital market cultural and creative content would get an insight into the manufacturing potential of cultural and creative industries of the Republic of Croatia which would allow future statistical metrics of this industry.

2. REVIEW OF CULTURE AND CREATIVE INDUSTRIES

Cultural and creative industries (CCI) are actually an emerging field and as such have not been defined in a universally accepted manner. The term “emerging industries” is used because cultural and creative industries have different definitions across the EU in terms of nomenclature and classification. “Creative industries” came into the spotlight in 1998 with a document published by the UK Department for Culture Media and Sport
Since 2008 to date, no unequivocal attitude on culture and creative industries has crystallized, thus in this paper culture and creative industries will be understood as those activities that follow the UNCTAD (United Nations Conference on Trade and Development) definition and classification of the “creative industries” (as a wider notion comprising the “cultural industries” as well).

UNCTAD definition of the creative industries (UNCTAD 2010, 8):
- are the cycles of creation, production and distribution of goods and services that use creativity and intellectual capital as primary inputs;
- constitute a set of knowledge-based activities, focused on but not limited to arts, potentially generating revenues from trade and intellectual property rights;
- comprise tangible products and intangible intellectual or artistic services with creative content, economic value and market objectives;
- stand at the crossroads of the artisan, services and industrial sectors; and
- constitute a new dynamic sector in world trade.

**FIGURE 1 - UNCTAD’S CLASSIFICATION OF CREATIVE INDUSTRIES**

Source: UNCTAD 2010., 8

In the Republic of Croatia, a study entitled *Creative and cultural industries mapping in the Republic of Croatia* was presented in May 2015 by the Croatian Competitiveness Cluster of Cultural and Creative Industries and the Institute of Economics.
Similarly to the lack of agreement on the scope of “creative industries” (as an example, the roles of science and sports are still debatable in this context), there is also dispute about the term “creative economy”. The term “creative economy” appeared in 2001 in John Howkins’ book about the relationship between creativity and economics. For Howkins, “creativity is not new and neither is economics, but what is new is the nature and the extent of the relationship between them and how they combine to create extraordinary value and wealth”. Howkins’ use of the term “creative economy” is broad, covering 15 creative industries extending from arts to the wider fields of science and technology. According to his estimates, in the year 2000, the creative economy was worth $2.2 trillion worldwide, and it was growing at 5% annually. For Howkins, there are two kinds of creativity: the kind that relates to people’s fulfillment as individuals and the kind that generates a product. The first one is a universal characteristic of humanity and is found in all societies and cultures. The second is stronger in industrial societies, which put a higher value on novelty, on science and technological innovation, and on intellectual property rights.” (UNCTAD 2010: 9). UNCTAD defines the “creative economy” as a “growing convergence on a core group of creative industries and their overall interactions both in individual countries and at the international level.” (UNCTAD 2010, 9)

Cultural and creative industries are different from the so-called traditional industries. Traditional industry products are manufactured by sectors that have been defined for decades, in terms of their nomenclature, as well as legal and administrative rules. Cultural

\[\text{Source: Creative and cultural industries mapping in the Republic of Croatia}^a\]

FIGURE 2 – Croatian classification of cultural and creative industries

<table>
<thead>
<tr>
<th>Museums, Libraries and Heritage</th>
<th>(Visual) Arts</th>
<th>Music and Performing Arts</th>
<th>Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>Film</td>
<td>Photography</td>
<td>Crafts - Traditional and Artistic Crafts</td>
<td>Architecture</td>
</tr>
<tr>
<td>Computer Programs, Computer Games and New Media</td>
<td>Electronic Media</td>
<td>Publishing</td>
<td>Advertising and Market Communication</td>
</tr>
</tbody>
</table>

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and creative industries differ from the traditional industries by the degree of integration, type of participants, type of markets, business models and growth rate (Puchta et al., 2010). Another distinctive feature is the high risk resulting from the fact that CCI products do not fall into the category of products that meet basic needs, leading to uncertain outcomes in terms of customer product acceptance on which their sales depend. The reason for this is that these products, unlike consumer goods, are not needed on a daily basis. Furthermore, cultural and creative industry products imply that production is subject to copyright regulations which have not been harmonized across different socio-economic systems. Urbanization driven by global trends has led to the phenomenon of cultural and creative industries becoming central to the development of many cities that use these industries as the basis of their development. As a result, a new term was coined - creative cities. In addition to contributing to the development of cities, cultural and creative industry products also contribute to the development of the economy as a whole. The reason for this lies in the fact that CCI products are mostly local, and the production in cultural and creative industries is based on the unlimited resources of individual creation, scientific and technological innovation, as well as the national cultural heritage. Given that intangible product categories (knowledge, skills, wealth of ideas, culture, heritage, etc.) are essential in CCI products, while material resources are essential in the production of traditional products, the main objective of the emerging CCI sector is to create its administrative and formal structure in the digital environment.

FIGURE 3: Values and shares of all creative goods - exports 2003-2012

![Chart showing values and shares of all creative goods exports 2003-2012](http://unctadstat.unctad.org/wds)

Source: Calculation based on UNCTAD data available at: http://unctadstat.unctad.org/wds

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b More about creative cities can be found in: Scott, A. J. (2006). Creative cities: conceptual issues and policy questions. *Journal of Urban Affairs*, 28(1), 1-17., available at: [http://escholarship.org/uc/item/77m9g2g6](http://escholarship.org/uc/item/77m9g2g6) [20.06.2015.]

Non EU 27 data were calculated as follows: data for the entire world – data for EU27
Considering the basic information on “creative industries” as an emerging sector, but leaning towards global operations and evolving into “creative economy”, it can be concluded that this type of business involves communication at a global level, international transactions and working with “big data”. Keeping in mind the specific features of products and services in this domain of business, the following research question arises (which will be addressed in this paper): Can an established system such as the exchange business in its digital version (DE$^d$) be applied in CCI as an emerging industry; could this accelerate its development and interaction between its stakeholders, as well as improve quality and safety of operations?

3. DETERMINANTS OF CCI OPERATIONS

This paper will elaborate on those CCI features which are key in defining the Digital Exchange of CCI (hereinafter DE-CCI). There are several important determinants of today’s global business operations the knowledge of which is a prerequisite for DE-CCI. Thanks to a dense population, a strong market for culture, its world-class cultural heritage and a highly talented creative class, Europe has long been a source of corporate leaders in the creative industries (Ernst & Young, 2014). Be it renowned international corporations, mid-sized companies or successful start-ups, many European businesses are in the global vanguard.

The determinants of global business operations in CCI sector are as follows:

- immaterial aspect of CCI is based on copyright
- global technology entrepreneurs (GTE) – entrepreneurs who use digital technology “to monetize their products or services” (Duening et al. 2014, 51)
- the need to overcome lobbies through (global) transparency of transactions.

The first determinant of global business operations in CCI sector mentioned above refers to the immaterial aspect of CCI based on intellectual property rights, and it relies on the “creative class” originating from the model “developed in the United States” (Weckerle et al. 2007, 14), in which creativity is “one of the most valuable products and driving forces of a national economy” (Weckerle et al. 2007: 14). The “creative class” represents mobile and globally active individuals typical of this new social class can only flourish in cities with professional structures and tolerant attitudes... The values of the creative class are individuality, meritocracy, diversity and openness (UNCTAD 2010: 11).

The same authors state that production within the “creative industries” is determined with different aspects of intellectual property (copyrights and related trademark rights, factory, 

\[d \text{ DE – Digital Exchange} \]

$^d$ The “creative class” represents mobile and globally active individuals typical of this new social class can only flourish in cities with professional structures and tolerant attitudes... The values of the creative class are individuality, meritocracy, diversity and openness (UNCTAD 2010: 11).
trade, and service brands, indication of source, designs, patents, topographies of microchips, and business and manufacturing secrets). This thesis is substantiated by the example shown in Figure 4.

FIGURE 4 - Immaterial aspects of the creative industries and corresponding protective mechanisms

<table>
<thead>
<tr>
<th>PATENT</th>
<th>COPYRIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application:</td>
<td>Application:</td>
</tr>
<tr>
<td>Simple e.g. molecule</td>
<td>Literary, Graphic</td>
</tr>
<tr>
<td>Complex e.g. microprocessor</td>
<td>Videographic, Audio</td>
</tr>
</tbody>
</table>

USEFUL IDEA    ORIGINAL EXPRESSION

Aspects of products and services in the creative industries worth protecting

DISTINCTIVE IDENTITY

<table>
<thead>
<tr>
<th>TRADEMARK</th>
<th>DESIGN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-physical Application</td>
<td>Physical Application</td>
</tr>
<tr>
<td>Badge of identity for goods and services e.g. logo, shape, sound, color</td>
<td>Shape, configuration, ornamentation</td>
</tr>
</tbody>
</table>


The second determinant of global business operations in CCI sector indicates the increasingly important role of global technology entrepreneurs (GTE). Some major features of this type of entrepreneurship (applicable in CCI) are given in the following nine points (Duening et al., 2014, 51-53).

Major features of GTE:

- Pay as you go: products and services are offered at a price and customers purchase them as they use them.
- Freemium: providing a base set of products and services for free and an enhanced set at a reasonable price (This business model is used by many Internet companies, such as Dropbox).
- Billable hours: the consultant bills the client on an hourly basis for services rendered, often with a minimum fee or “retainer” as part of the business model.
- Advertising based: the goal is to aggregate users and sell advertising based on the number of daily and monthly visitors (e.g. Facebook).
- Subscription pricing: payment of a fee to gain access to products (usually information products) and services for a fixed period of time.
- Distributor or reseller: a distributor business model (doesn’t actually make anything, but, rather, aggregates products from companies that do, selling these products to end users – e.g. in-home medical technology companies).
- Retailer/Wholesaler: familiar business models where the goal of the entrepreneur is to aggregate and hold products for end users and make them available as needed (e.g. online retailers abound - Amazon, Fab, and Gilt).
- Landlord-Leaser-Licensor: holding title to particular assets (such as office space or intellectual property) and permitting others to use the assets in return for some consideration, typically a fee.
- Broker: A broker doesn’t buy or sell, but rather facilitates the transaction between buyer and seller and generally charges a percentage of the transaction (e.g. e-broker as eBay).

As the CCI sector is influenced by global business determinants, it is to be expected that global technology entrepreneurs would aim to participate in the CCI and conduct business on platform-based markets, thus becoming creative global technology entrepreneurs (C-GTE). Platform-based markets have become increasingly prevalent, and comprise a large and rapidly growing share of today’s economy (Eisenmann et al., 2011). Such markets are described as multi-sided because multiple groups of participants - such as consumers and complementors - need to gain access to the same platform to interact with each other, and a platform’s success depends on its ability to bring them on board (Rochet and Tirole 2003; Parker and Van Alstyne 2005).

Currently, business operations on platform-based markets are based on the supply of finished CCI products. Companies like Amazon, eBay, Deezer, iStock etc. are the best examples what e-brokers in CCI can look like, how they organize their network location and offer goods from a specific cultural and creative domain.

From the perspective of cultural and creative projects, or finished products and services, eBay was described as an example of a platform-based market. Upon examining eBay web site, it was evident that a large number of CCI products were offered in the menu set as default eBay search.
FIGURE 5 – Ebay web page and its most popular categories


Default search categories on eBay are based on the company’s internal analyses. The criteria for internal analyses are the keywords used by eBay users searching for items on the eBay platform. In other words, the more valuable content is to users, the more valuable content is to the search engines. Lack of segmentation of eBay product categories leads to entropy. As a consequence, end users fail to get full information about the searched creative product.

For instance, in the case of a book as a publishing sector product offered on eBay, a buyer will be provided with the following information: book title, price, delivery, author and publisher; however, there is no link to other relevant content (e.g. related genre, other titles by the same author, author's biography, and the like).

Amazon platform-based market is very similar to eBay, but because it specialises in the publishing sector it provides more detailed and useful information to its users, such as authors’ biographies, access to their bibliographies, follow-up on the activities of the searched author, forums and recommendations related to the title and/or author, etc.

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2 Entropy is a natural tendency of a system to come to a state of complete chaos, as a result of its complete lack of organization. In contrast to entropy, information is a measure of order (organization) of a system, i.e. that which eliminates or reduces the vagueness of a system or reduces the uncertainty of change. (Croatian encyclopaedia - online edition, available at: http://www.enciklopedija.hr/natuknica.aspx?ID=60880, accessed: May 10, 2015).
3 “Amazon Follow enables you to stay connected with what's new from the people and brands you follow. For example, Amazon Follow will notify you weekly when articles are published by a person you follow.” Available at: http://www.amazon.com/gp/help/customer/display.html?nodeId=201813230, accessed: May 10, 2015.)
The purpose of this paper is not to list and explain all digital platform-based markets related to CCI. In addition to the two platform-based markets mentioned above that focus on the sales of finished products in direct communication, there are examples of well-organised platforms on which creative authors communicate directly with end consumers who are as often as not SMEs.

On some platforms, e-brokers provide customers with information about authors (e.g. Amazon), while on others authors advertise their own creative works (iStock, Creative Market, Author Solutions, Kickstarter, etc.). In most of the cultural and creative sectors, creative workers communicate with creative manufacturers who can realize authors' projects/ideas - through agents or other intermediaries (e.g. in the publishing sector - editors). Creative manufacturers handle the distribution and trading of products on platform-based markets. That is shown in Figure 7.
Figure 7 shows the third determinant of global business operations in CCI sector which points out the need to overcome lobbies through (global) transparency of transactions. This is clearly stated in EBN (2014, 14): “Many CCI sectors are not organized in associations or lobbying groups representing their needs and interests. As a consequence, the sector-specific requirements are still not well known and fully addressed by proper public measures:

- As a unifying organization, an EU|BIC can support communication processes between the CCI actors, thus helping to create a common culture and language, and perhaps a shared identity that might later lead to establishing a political organization or association,
- An EU|BIC can effectively empower CCI companies with their support in building a pool of talent, of resources, of drivers, of complementary expertise in terms of creative approaches as well as in terms of business and entrepreneurship. Helping people to help themselves inevitably leads to a shared value system and a deeper understanding of one’s own strengths.”

For the reasons stated above, the authors of this paper conclude that (digital) exchange-type operation of CCI is a way to combine the activities of the “creative class”, avoidance of lobbying, and exchange business operations as a (transparent) way to appear on the market. All this indicates that the “broker” should help think about how CCI GTE products/services actually will be sold in the marketplace and how they can attract sufficient customers to
generate a profit. Given that the role of the broker is inseparable from exchanges\(^k\), it is assumed that exchange business will have to adapt to digital age requirements.

4. PROPOSAL FOR A CCI DIGITAL EXCHANGE

Exchanges as places of trade in similar goods (products and services) which are not in that particular location, with business conducted according to precise rules and practices, appeared as early as 12\(^{th}\) century (in Lyon), followed by other European trading centers (Frankfurt, Paris, Amsterdam, London). The exchange business flourished in the 19\(^{th}\) century. Using the exchange business operations and all the above determinants as a blueprint for CCI is useful to a range of interest groups within these industries. An outline of the operations paradigm of an industry, the concept and the final construction are the initial settings that clarify how important it is to popularize culture and creative industries.

4.1. DE-CCI Paradigm

A platform-based market for CCI is a virtual space bringing together the traditional supply and demand. At the moment, it is developed to provide customer insight into finished CCI products and it is more or less specialised in specific CCI sub-sectors.

As shown in Figure 7, a review of currently available platforms has shown that there is a lack of Digital Exchange which would enable market identification and implementation of creative projects/ideas. This could be achieved on a specialised platform-based market for CCI in which creative projects/authors’ ideas would be listed. Digital advertising and direct insight of product seekers into the offer of projects/ideas of creative workers would help avoid lobbies. This in turn would enable direct communication between creative workers and manufacturers without middlemen, as well as prevent authors’ ideas from becoming outdated depending on the terms of the tender to which authors submit their projects/ideas.

By announcing on the Exchange, suppliers acquire protection of their authorship rights as creative ideas are offered to interested buyers (producers of complex cultural products based on the initial idea – e.g. a book based on a manuscript or a film based on a book). The advertised creative ideas/projects are covered by copyright from the date of registering, i.e., from their first appearance on the Exchange. This kind of “meeting in the market” between cultural and creative supply and demand provides all the public stakeholders of CCI with insight into creative projects that have not been implemented yet, which enables the market dynamics to develop without participation of middlemen (agents, agents, agents).

\(^k\) Exchanges as places of trade in similar goods (products and services) which are not in that particular location, with business conducted according to precise rules and practices, appeared as early as 12\(^{th}\) century (in Lyon), followed by other European trading centers (Frankfurt, Paris, Amsterdam, London). The exchange business flourished in the 19\(^{th}\) century.
managers, etc.), in other words, without involvement of lobbies. Furthermore, DE-CI allows the collection of data on market transactions as well as the creation of statistical aggregates for long-term measurement and forecasts in the CCI market based on such databases.

FIGURE 8: DE-CI

The construction of DE-CI on the cultural and creative market would allow direct market communication (and competition) between the author (content) - manufacturer (product) - financier (content and / or products) by avoiding intermediaries and lobbies. DE-CI would faced all stakeholders (and phases) of the production process on
the way of authoring ideas (content) to her transformation into a product. Considering that the access to DE-CCI is public, as well as the market competition that the DE-CCI organized, there is no fear that the DE-CCI became a monopolist or selector of copyright ideas. On the contrary, by opening marketing competition on the market of copyright idea (content) is achieved marketing competition that is simultaneously socially responsible because it is an open, free and transparent.

5. DISCUSSION

Once a detailed DE-CCI concept is completed, DE-CCI construction would require assistance from the EU Commission or another body (e.g. UNCTAD) – from devising a CCI nomenclature valid in most EU member states to financial and legal assistance in the development of DE-CCI. Such a DE-CCI construction would presumably gain business reputation and trust by being set up on an EU server or other institution with public interest. Furthermore, it is essential to determine authorities with regard to DE-CCI updates and administrative organization.

With modern digital operations it is quite realistic to contemplate the paradigm, concept and construction of DE-CCI as a communication and business bridge that allows local CCI entrepreneurship easier transition to global entrepreneurship. Another important feature of DE-CCI is the possibility to protect intellectual property rights simply by advertising on DE-CCI, as well as preventing the dominance and omnipresence of lobbies. All these elements would allow certain segments of art to exit the domain of “grey economy” as well as the calculation of statistical aggregates necessary for monitoring the CCI sector and forecasting its future trends.

If such a platform were in existence, it would become possible to generate large quantities of relevant statistical data which are required for monitoring the development of these industries, their scope and impact on the economy as a whole. This would then prove invaluable to statisticians and analysts, who would gain access to business operations data on DE-CCI and additional possibilities to devise new aggregates and up-to-date information on CCI.

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