

Creative Economy, Manufacturing Industry, and Agribusiness in the New Era of Globalization

Diego Santos Vieira de Jesus
ESPM-Rio, Rio de Janeiro, Brazil

The aim is to examine how the creative sectors and professionals contribute to the manufacturing industry and agribusiness in the new era of globalization. Creative sectors can develop innovations and experiences as part of their own activities, as well as procedures, technologies, and routines in business models, which increase the efficiency or the quality of the results. Creative professionals can support innovation and the generation of experiences.

Keywords: creative economy, creative industries, creative class, manufacturing industry, agribusiness, globalization

Introduction

The new era of globalization is characterized by the relentless innovation in products and markets, the need for even greater economic productivity in developed markets, a greater focus on matching demand for the world's critical resources with their supply, the rising pressure on free market-oriented governments due to societal and demographic changes, and the global interconnectivity of capital, goods, information, and people (Hendrix, 2012; Jesus, 2009; 2010; 2014). This era of globalization takes place in a moment when the convergence of technological innovations on the physical, biological, and digital levels is changing the ways of living, working, and consuming. The Fourth Industrial Revolution has produced transformations such as technologies capable of promoting disruptions in relation to well-established procedures (Cyzmmeck, 2020). It combines physical and digital technological innovations, such as artificial intelligence (AI), internet of things, computer clouds, adaptive robotics, and augmented reality (Barbosa, Costa, & Pontes, 2020).

While the debates about the new era of globalization and the Fourth Industrial Revolution have grown in importance, creative economy started to be understood as an engine for development. The term refers to activities based on individual and collective talent or ability, which encompasses a great range of sectors, such as the audiovisual, music, and book industries, new software sectors, design, architecture, and bioengineering, for example (Miguez, 2007). It creates conditions for a more diversified set of actors leading the economic and political initiatives, including small and medium-sized enterprises and a range of professionals which compose the creative class, responsible for economic development because they aggregate talent, technology, and tolerance (Florida, 2002; 2005; Jesus, 2017; Landry, 2008). The creative economy has the potential to recognize the relevance of human capital in integrating sociocultural and economic goals and opportunities based on creative entrepreneurship (Howkins, 2001; Jesus & Kamlot, 2016). Creative sectors support high-tech

companies (Jesus, 2011; 2012; 2013) by developing creative inputs in areas that invest in research and development. Creative professionals may also contribute to innovation in less knowledge-intensive areas (Cunningham et al., 2004).

The aim of the article is to examine how the creative sectors and professionals contribute to the manufacturing industry and agribusiness in the new era of globalization and the Fourth Industrial Revolution. In line with Granados, Bernardo, and Pareja (2017), the author argues that the creative sectors can develop and introduce innovations and experiences as part of their own activities, as well as procedures, technologies, and routines in business models, which increase the efficiency or the quality of the results. Along with Müller, Rammer, and Tribby, (2009), the author also argues that creative professionals working in more traditional sectors of the economy can support innovation and the generation of experiences in these sectors through inputs that relate to standard activities of creative enterprises, which serve as a basis or inspiration for traditional sectors.

Creative Economy, Manufacturing Industry, and Agribusiness

Rather than a separate sector, the creative economy is integrated throughout all industries. It is not limited to core creative industries and encourages innovation-driven growth, with creative workers embedded throughout all economic sectors and responsible for the creation and adoption of new products. Although there are many people who are core or specialist creatives working in positions in the creative industries or working in administrative, support or managerial positions in the creative industries, others work in embedded creative positions in non-creative sectors (Rodgers, 2015). Laaksonen and Gardner (2012) argue that creative professionals and sectors contribute to the manufacturing industry and agribusiness, for example, with creative thinking, innovation, new solutions, instruments for networking, interdisciplinary research, alternative perspectives, working methods, and fresh insights. Fleischmann, Daniel, and Welters (2017) indicate that creative industries are driving economic growth with their innovation methodologies, including cocreation—which is based on the active involvement, in the value creation system, of people who will benefit from the product, service, or process—and design thinking, which focuses on building empathy, fast learning, rapid prototyping, and iteration of solutions through user feedback. Cocreation and design thinking have approached innovation from a human-centered perspective, spawned disruptive and beneficial business models, and cross pollinated their ideas within other sectors in urban and rural areas.

Creative industries produce and commercialize ideas which contribute directly or indirectly to the generation of services and products. They also provide innovation impulses to technology producers because they often demand adaptations and new developments and offer services which can bring inputs to innovative activities of businesses and organizations within and outside the creative economy (Bakhshi & McVitte, 2009; Fleischmann et al., 2017; Muller et al., 2009; Reid, Albert, & Hopkins, 2010). According to Teece (2007), embedded creative professionals and creative sectors contributing to non-creative industries can promote dynamic capabilities, which refer to the capacity to shape opportunities and threats and maintain competitiveness through enhancing, combining, and reconfiguring intangible and tangible assets. Lee and Rodriguez-Pose (2014) argue that embedded creatives may drive innovation because of their propensity to move fluidly among work roles and bring advanced knowledge of new techniques and processes. According to Hearn and Bridgstock (2014), companies need to support embedded creatives with spaces for process innovation in which they can develop interdisciplinarity.

Creative Economy and Manufacturing Industry

Manufacturing is the essence of the secondary sector of the economy and encompasses a set of activities related to the fabrication of products for use or sale, using labor and machines, tools, and chemical or biological processing or formulation. It is commonly applied to industrial design, in which raw materials are transformed into finished goods on a large scale, which can be sold to other manufacturers of more complex products—such as aircraft, household appliances, and vehicles—or distributed via the tertiary industry to consumers. Typically, innovation in manufacturing occurs through modifying products and introducing products to the market, and design innovation commonly concerns external facing functions, such as branding and new product development. Creative professionals who are usually employed in the manufacturing industry are graphic designers, marketing specialists, software engineers, industrial designers, fashion designers, ICT business analysts, architects, designers, planners and surveyors, arts professionals, and visual arts and crafts professionals. The creative professionals in a manufacturing company may influence the nature of the products, their delivery, and the ways how the customers are reached. The designers, for example, can influence the nature of the product, the shape it takes, its power usage, output, and appearance. The marketing department impacts the delivery of the product and how customers are reached (Kamlot & Calmon, 2017; Kamlot & Fonseca, 2010; Rodgers, 2015).

In the architecture and design segments, the main embedded creative professionals can play a role in the decision-making process by specifying how the activities will be implemented. The designers might undertake all the styling or support the larger companies in their styling with feedback, because they know technical aspects, such as fabric, seam lines, and joins. Designers may help develop a product with a better value proposition, despite their finance and time restrictions and the difficulties some companies have in capitalizing on the potential of creative staff. In the advertising and marketing segments, the involvement of the sales and marketing manager in the company influences the delivery of the product in terms of the way the customers are reached through the websites—making them unique and functional, with real time information, visual merchandising, and brochures with targeted information, for example. The marketing and communications managers may lead teams of designers and organize web development and trade shows (Rodgers, 2015).

Creative Economy and Agribusiness

In the Fourth Industrial Revolution and the new era of globalization, consumers are increasingly more informed about food systems and interested in sustainable production, animal welfare, climate change, food waste, and a lifestyle related to improved health knowledge and nutrition education. These emerging trends in the food system are connected to the transition to a post-industrial creative economy, in which the understanding of food consumer demand, the knowledge of food industry and agriculture employees based on creativity, and flexibility of processes of production become fundamental (Klimczuk & Klimczuk-Kochańska, 2019). In rural areas, some creative industries contributed to local and regional development strategies, and the countryside turned into a place where the creative economy was differently manifested and articulated from the standard creative script based on cities. Its economic foundation has shifted, at least in part, from agricultural production to a site of consumption, tourism, and recreation. At the same time, farm diversification has turned to various alternative economic activities, including creative work which revitalized and rebranded rural food and drink production and consumption cultures. Many creative workers moved to rural locations, and creative

industries are harnessed as parts of economic development strategies and rural regeneration tools (Bell & Jaye, 2010).

The world population is increasing, and the production of agricultural products should grow by 60-70% over the next years. However, the countries with a more relevant agricultural sector have not developed expressively their innovation potential. Over the past decades, a variety of agricultural crops has been created, and their development would provide an opportunity to increase the efficiency of the agricultural industry. In the transition to the digitalization of agribusiness, the workforce must be characterized by considerable mobility, flexibility, and digital competence, which are creative professionals' competences. Most tasks cannot be solved in the new conditions without innovative developments, which determine the need for agricultural production in training specialists with innovative thinking. Information has an important impact on the distribution, exchange, and consumption of goods, as well as on the emergence of partnership and relations among participants in economic relations (Kuznetsova et al., 2018). Bioengineering and information technology develop fast, but the resources of agriculture and rural districts are usually scattered, with no efficient integration and diffusion systems. The value of agriculture can be enhanced by the integration of the natural resources with innovative technologies—which enables new high-value added products to be developed and new markets to be sought—and the connection between agriculture and processing, distribution, and service industries. To enhance added values of agricultural products, it is necessary to build a stable distribution basis to provide the products to consumers and create more jobs in the process of inter-industry connection. The smart agriculture—integrated with advanced information and communication, biotechnology, environment technology, and nanotechnology—is turning into a high-value added integrated industry, because these technologies—which are important elements in the development of creative economy—contribute to precise production, efficient distribution, and fair management. The integration of agribusiness with the information and communication technologies is fundamental to embody creative economy as an alternative to address the insufficient workforce issues related to aging, changing climate conditions, more complex distribution structures, and the fast consumers' taste changes (Joon-Kee, 2013).

Noel and Qenani (2013) argue that different skills in agribusiness became more important to employers and the labor market, such as critical thinking, communication, teamwork, creativity, innovation, and knowledge of marketing and finance. Agribusiness organizations are more flexible, complex, decentralized, and reliant on collective action and cohesiveness. The development and implementation of technology and innovations are critical to long-term success of the agribusiness industry. Creative professionals are increasingly important in this context because of the unlimited horizons they may open through multidisciplinary processes. Creativity may be a key to solving social challenges and, at the firm level, an extremely important skill in creating competitive advantages. Flexibility to work in ever changing conditions and soft skills, such as interpersonal communication, ability to collaborate, and work in teams, are gaining value and importance in agribusiness, which is an advantage for creative professionals. In a changing business environment, creative professionals who have critical thinking become valuable resources for companies, because they analyze situations and solve problems on their own. Managers behave more like facilitators of synergetic processes, who hire and bring together creative employees, engage them continuously in planning stages, and allow them to make decisions (Noel & Qenani, 2013).

Conclusion

The embedded creative professionals in the manufacturing industry may face a lot of challenges, such as financial restrictions and a lack of company support for creative workers (Rodgers, 2015). However, creative professionals and sectors can include research support for innovation in the development of more efficient and innovative work environments in more traditional activities of the economy, as well as generate collaborative networks between creative and traditional enterprises and attend the demands of customers in traditional sectors for creative inputs with regard to ideas, design, and marketing and the introduction of products, services, and experiences in these markets not directly associated with the creative economy (Granados et al., 2017; Müller et al., 2009). However, there are still many obstacles to a more intense relation among creative economy, manufacturing industry, and agribusiness in many parts of the world. The asymmetrical distribution of creative industries can reinforce contrasts in different territories (Figueiredo, Jesus, Robaina, & Couri, 2019). In various places, there are inadequate regulatory frameworks to manage potential conflicts between the creators' financial remuneration rights and the public access to knowledge, as well as the gaps regarding knowledge and skills because of failed education systems, with no effective development of the students' talents and critical thinking (Jesus & Figueiredo, 2018; Jesus & Kamlot, 2016; Jesus, Kamlot, & Dubeux, 2019; Lemos, Dubeux, & Rocha-Pinto, 2014).

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