Therefore, real case studies of companies using vendor-managed inventory (VMI) were taken into consideration. These case studies showed clearly that vendor-managed inventory (VMI), once implemented correctly, can improve business and more important, the service level for the customers.

This research could show, that in almost all cases vendor-managed inventory (VMI) could contribute to improve business and reduce the bullwhip effect.

In the context of Lean, vendor-managed inventory (VMI) seems to be an appropriate concept to remove waste and ballast from businesses, make supply chains leaner, more efficient and flexible.

Since vendor-managed inventory (VMI) is classified as one of the collaborative concepts, the next steps for further studies should include collaboration strategies such as QR, CRP, ECR, and CPFR. This paper gives an extensive insight into vendor-managed inventory (VMI). The next interesting step would be to analyse the above mentioned collaboration strategies and compare them to vendor-managed inventory (VMI) regarding inventory management, material flow, the bullwhip effect and supply chain control.

References


D. Kovalchuk,
1st year student of School of Business of BSU
Scientific supervisor:
PhD in Philosophical sciences, Professor
I. Matsevich-Dukhan

ON THE WAY TO CREATIVE ECONOMY:
ADDRESSING THE PRINCIPALITY OF LIECHTENSTEIN

In the raising amount of research works on the turn to the creative economy the Principality of Liechtenstein is quite rarely considered as one of the most representative examples, or at least as a supporting and fitting one within the context of the world fashionable trends in rebranding national economies. This paper aims to demonstrate that nowadays even the smallest and most developed countries turn to the conception of the creative economy in order to rebrand their own economies in terms of the ‘creative one’. To clarify this raising interest in an emerging socio-economic conception, it is necessary to enquire into the official reports of Liechtenstein and reveal both theoretical and empirical background for this shift.
One of the implied research questions, which cannot be covered in this paper but will be present in the background of our discussion, touches upon possibilities to take into account recent achievements of Liechtenstein's experience in the Belarusian context [1]. The enquiry into Liechtenstein's case may provoke us to go beyond the comparative analysis of creative economies in Eastern Europe, reopen and broaden new horizons of the world economy through the lens of such small countries as the Principality of Liechtenstein.

In spite of the fact that Liechtenstein is still perceived as one of the most developed financial sectors in the world, even after the world financial crisis [2], over the last decade alternative economic strategies with the focus on the creative sector have been elaborated to reshape the vision of its economy. Taking into account the geopolitical stability and the post-industrial rapid development of the principality, the sector of the creative industries has the potential to demonstrate a new innovative image of the national economy by attracting additional investment capital into an emerging cluster of active interaction between science, arts, manufacturing and business. The most talented creative class [3] becomes interested in new jobs at the heart of European stability and sustainability in the long run. According to Liechtenstein's cultural mission statement, companies in the creative industries are "Impulse givers for culture and business" [4, p. 4] and the country should be valued in the world by the year 2020 through its distinctive culture.

Here one may raise the crucial question: But what exactly is the sector of the creative industries, which is quite often considered as a magic instrument of economic transformation on the way to both innovative and sustainable development? According to the initial British "Creative Industries Mapping Document" (DCMS, 1998), these industries were defined as "those industries which have their origin in individual creativity, skill and talent which have a potential for job and wealth creation through the generation and exploitation of intellectual property" [5].

In Liechtenstein the creative industries are made up of 13 submarkets. The design industry (27,4 %), the architecture market (15,3 %) and the software and games industry (13,8 %) are the three most important submarkets, followed by the art market (9,1 %), the market of performing arts (9,1 %), the press market / broadcasting market (8,8 %) and the music industry (7,8 %). Other submarkets are the advertising market (6,2 %), the phonotechnical market (2,9 %), the book market (1,7 %), the film industry (0,3 %) and the craft trade (0,2 %) [4, p. 4].

It has always been assumed that huge cities are magnets for the key actors of the creative industries. This trend is reflected in the official reports of the neighbouring countries of Liechtenstein, such as Austria and Switzerland. However, Liechtenstein with population 49 times smaller than in Vienna is one of the few countries in the world with more registered companies than citizens and the highest density of employees and workplaces in the creative industries compared to its neighbouring regions.

The creative economy of the Principality of Liechtenstein has great potential. The First Liechtenstein Creative Economy Report [4] helps recognise this potential and awaken further interest in fostering the formation and development of this sector. This report is a part of the so called PARK research project at the Institute for Architecture and Planning of the University of Liechtenstein. PARK explores the potential of the creative industries for the economy and culture of Liechtenstein. It employs the British experience in the field of cultural and creative industries. Let us briefly enquire into the formation period of the very narrative of this sector in Europe.

In 1997 Tony Blair's government set the goal for the UK cultural policy to promote regions and cities by means of the creative industries. In 1998 was coined the term "creative industries" and published the first British political program titled "Creative Industries Mapping Document" [5]. Soon afterwards, this term was introduced to the cultural and economic policy agenda of many European countries.
For many centuries, the most popular piece of Liechtenstein’s culture has been quite often associated with the Princely Collections at the Liechtenstein Museum in Vienna, which contain major European art works and is still considered as the most important private art collections in the world [6].

Not until after the Second World War, country’s economy began to develop very rapidly. The state cultural policy in the 1960-1970s was mainly focused on private initiatives [7, p. 4]. The major cultural institutions were developed by initiatives of relatively small social groups. Government made it possible using the principle of subsidiarity, which encouraged diverse social groups to participate in cultural projects.

By 2011 Liechtenstein had faced the possibility and necessity to identify its own sector of the creative industries in the context of the raising interest in this sector of the world economy. The first statistics on this sector reveals that the creative sector is clearly present in the overall economy: out of 35 253 employees, there are 6.36 % or 2243 creatives [4, p. 22].

The number of employees of Liechtenstein’s creative industries increased in 2005–2008 and the tendency remained rising in most sub-markets until 2011. The largest market in 2011 was the design industry with around 615 employees. The film industry and the arts and crafts were the smallest submarkets in the country, with only 5 to 7 employees respectively [4, p. 17].

Now let us turn to the density of the creative economy. Despite its small land area of 160 km² the Principality of Liechtenstein has in 2011, compared to the neighbouring regions (Switzerland, Austria), the highest density of employees and workplaces of the creative industries: with 14,01 creatives and almost 5 workplaces per square kilometre, the micro-state is also at the top of this evaluation [4, p. 23].

To demonstrate the rapid development of this sector, we may turn to the statistics of the neighbouring countries. The share of employees in the creative industries as part of the economy as a whole in Principality of Liechtenstein is comparable with the data on the same sector in Vienna and Zurich [4, p. 19]. In 2008, 2209 individuals were employed in the creative industries, accounting for around 7 % of the total 33 415 employees in the country. A little higher is the share in Vienna, where 8 %, about 57 392 individuals out of 51 357 individuals. By comparison, Zurich had the highest percentage of creative professionals with 9 %: 32 763 individuals out of 360 000 individuals are employed in the creative industries.

<table>
<thead>
<tr>
<th>Creative economy in Principality of Liechtenstein in comparison</th>
<th>Principality of Liechtenstein</th>
<th>Vienna</th>
<th>Zurich</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees/creatives</td>
<td>2209</td>
<td>57 392</td>
<td>32 763</td>
</tr>
<tr>
<td>Total amount of employees in the country</td>
<td>33 415</td>
<td>751 357</td>
<td>360 000</td>
</tr>
<tr>
<td>Percentage</td>
<td>7 %</td>
<td>8 %</td>
<td>9 %</td>
</tr>
</tbody>
</table>

The main goal of an emerging policy is to transform Liechtenstein into a country that is perceived internationally through its culture. In this way, Liechtenstein is following the general plan of the European Union to invest more heavily in the cultural and creative sector [7, p. 4].

This rapid development would not be possible without the government support of creative business. Country invests around 8.4 % of GDP in research and development [8]. Today the value of a product is not only based on its quality but also on its uniqueness, originality. The success of Liechtenstein as a place of work and knowledge depends heavily on research and innovation activities. High-quality funding, high-performance organisations in the field of "research and development", good networking and short distances play a key role here.

There are such innovative initiatives as “HOI start-ups”. They support entrepreneurs by experienced service and network of partners, who are available for advice. In inspiring environment
with modern infrastructures, they provide everything that is needed for the successful realisation of business ideas. "HOI start-ups" brings together creative and strategically minded individuals to jointly tackle and implement new ideas [9]. The start-up investor Christoph Böckle, who founded the company affinity ventures AG with Partners in Ruggell, says: «Short decision-making channels and rapid processing by public authorities are particularly important for small companies» [10].

Another representative example of creative clusters in Liechtenstein is the sector of Blockchain companies. More than 100 of them have already settled in Liechtenstein, some of which are worth billions of dollars [11]. "They (Liechtensteiners) are not putting any financial incentives in place, but they’re making it really easy to incorporate a cryptocurrency business. You can open a company without a bank account, just by using Bitcoin or Ethereum", – says Y. Malahov, the founder of Aeternity, i.e. a new blockchain for smart contracts. He also says that Liechtenstein was “an obvious choice” while choosing the location for his new business [12].

Liechtenstein’s government has adopted the consultation report on the Blockchain Act. With this, the country intends to provide greater legal certainty for users of blockchain technology and support the positive development of the token economy. According to Prime Minister Adrian Hasler, “as a state, we must consistently improve our framework conditions for businesses to ensure our prosperity and attractive jobs for the next generation” [13]. This is a huge step forward.

Thus, coming closer to a general conclusion, we may consider Liechtenstein as an emerging space of a new generation of creative clusters and innovative networks. If we turn to its virtual space in the Internet, we may notice that Liechtenstein aims at the formation of the creative industries sector with a clear focus on several main objectives: to promote the national sector and make it visible on the international map of creative economies, and thereby to enable the international collaboration with new prospect for building innovative infrastructures worldwide.

The creative economy has become the subject of diverse economic policy strategies worldwide. Various cities and regions in Europe have recognised the meaning of this economic field for structural change, innovation and growth, especially in recent years. On the one hand, the value of the creative economy may be considered as a cultural one, since its region becomes an “innovative place” to create together within cultural and intercultural communities. On the other hand, it is an economic one, since it fosters the national economic development in terms of GDP.

The creative economy reports of the Principality of Liechtenstein [4] show that there is still a great creative potential in the country, which is to be outlined. Their figures show a raising density of creative professionals in the country in comparison to the neighbouring regions. This potential can contribute to fostering and promoting successful economic strategies of the country if the national sector of the creative industries becomes quite visible and identifiable on the global map of creative businesses. Employees in this sector can be encouraged by building competitive professional networks in the global multicultural environment. The recent Liechtenstein Creative Economy initiative is a step forward to make the creative industries and their development visible on both cultural and economic maps in the country and beyond. This initiative establishes the foundations to foster the development of Liechtenstein’s emerging economic sector.

In 2019 the Principality of Liechtenstein celebrated its tercentenary and formulated new strategic tasks for its further rapid economic development. Today there is an attractive friendly environment for new businesses and innovation projects in Liechtenstein and the country has been promoting it further from a new conceptual perspective. In such a way Liechtenstein demonstrates its ability to diversify its economic policy in terms of most relevant economic trends in the world facing the challenges of sustainable development.
The problem of "brain drain" in the Republic of Belarus

Every year in the Republic of Belarus the level of education rises to a level higher than the previous one. But even the ease of education has led to some consequences. At the moment, there is a serious problem in our country – the lack of workplaces. And this reason is one of the most important for the emergence of such a problem as "brain drain" in the Republic of Belarus. People leave our country in search of a "better" life, a "better" place of work, a "better" income, having no idea whether they will get this "better" life there or not.

Brain drain as a global phenomenon

"Brain drain" is the process of mass emigration from a country or region of qualified workers, professionals, scientists, usually for better living conditions or higher salary. Many studies show that