

Evaluation of Selected Slovak Bookstores Using Modern Management Analysis Tools

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Abstract

The aim of the paper is to evaluate the current state of selected bookstores in Slovakia and to suggest possible recommendations and changes that the organization should apply, or to point out the established processes and procedures that bring economic prosperity to companies. In a dynamic world, every company needs tools and methods to increase business efficiency. High competition in the global market determines the need to find ways to be competitive. An important role of management is to know and identify actual trends that affect the company and to be able to respond adequately. This requires not only the knowledge and experience of management, but also a team of people who are not afraid of changes and their aim is to adapt to the requirements of the market as much as possible and thus increase the overall competitiveness of the company. In the first chapter of the paper, we have processed a brief theoretical basis in connection with the issue of modern management tools from home and abroad. Based on the studied knowledge, we analyze the impact of change management in selected companies and how social networks affect and are used by companies in Slovakia. We will also focus on how agile organizations can better respond to change and adapt more flexibly in unexpected situations, such as the current COVID-19 pandemic.

Keywords: management tools, bookstores, prognosis, DEA, efficiency

JEL classification: C58, M11, M21

1 Introduction

In today's world, there are several new challenges and obstacles that businesses face. Whether it is changes in economic conditions associated with declining confidence in markets and increasing pressure on natural resources, or significant changes in the demographics of customers and employees (Grover et al., 2018). Globalization not only results in a dynamic increase in competition, but the

globalization of markets for businesses brings a level playing field for access to information, resources, and technology. For this reason, companies need to respond to these new challenges in a truly flexible and efficient way if they are to succeed in the marketplace. It is essential that traditional business methods adapt to new changes and new market opportunities. The role of business managers is to continuously monitor these changes, evaluate them and react accordingly. The change in the business environment leads to the need to develop new management methods, techniques, tools, and procedures that enable organizations to adapt to current market trends (Settembre et al., 2021).

The basic idea of the process approach is that the reason for the company's low performance is inefficient internal processes that should change towards increased efficiency and higher added value for the customer. Many authors consider process management to be a real milestone for 20th century management (Sarraf – Nejad, 2020), Fuertes et al., 2020). Managers of different organizations use several methods and tools, but their final selection is a combination of several of these methods and tools and depends on many factors. Firstly, from the knowledge, skills, and abilities, but also from the personal attributes of the manager, as well as from his ability to lead a business and work team of people. In the past, there were times when modern approaches to managing an organization were applied only by the largest and most powerful companies and those who initiated and led change (Creel, 2019, Shaturaev – Bekimbetova, 2021).

Currently, their knowledge and use, is one of the essential requirements for survival in the market. In recent years, management methods and tools have become an increasingly integral part of the manager's work. These include efforts to increase revenue, improve quality and efficiency, introduce innovations, and plan for the future. Managers are constantly looking for relevant tools and techniques to increase the overall performance of the company. In today's fast-paced world, successful companies are those that can sense change and respond to it in an adequate way.

2 Analysis of the external environment

We chose STEP analysis for the analysis of the external environment. Through this analysis, we will get closer to the company's surroundings in all its areas. We will discuss external factors affecting the company, which are not controllable from the company's position.

2.1 Political factors and legislative factors

The bookstore provides its products and services in Slovakia, so it is primarily influenced by the political environment in Slovakia. Each country has its own specifics in terms of its laws, and each company should analyse and take these factors into account in strategic planning.

The impact of Brexit on the Slovak market in 2019 was not yet known, but it is certain that the worst option would be the departure of Great Britain from the EU without an agreement. Membership in the European Union is essential for Slovakia.

This also has many benefits for retail. The European single market, the free movement of workers, or even cheaper international calls. The political environment in 2020 was significantly affected by the parliamentary elections and election programs of individual political parties. A particularly new situation has arisen because of the COVID-19 pandemic, where anti-pandemic measures have significantly affected the lives of all people, businesses, including our bookstore. Since the curfew, the closure of operations, or the prohibition of selling another, or the regulation of the number of customers in stores, all this has had an impact on the company we have chosen. In this context, the largest package to improve the business environment and reduce the administrative burden in the modern history of Slovakia was approved, or a package of 115 measures from the workshop of the Ministry of Economy, which was to help and simplify business in Slovakia. From 1 January 2020, a reduced VAT rate of 10 % was applied to newspapers, magazines, and periodicals. The aim of this VAT reduction was to support traditional print media (Kubová, 2019).

2.2 Economic factors

In 2019, gross domestic product growth slowed more markedly. The decline in economic activity in 2020 was reflected in all four quarters, while the pace of decline slowed at the end of the year. A similar situation occurred in 2009, which is characterized as a period of financial crisis. For a closer look, the following figure shows the development of GDP in recent years.

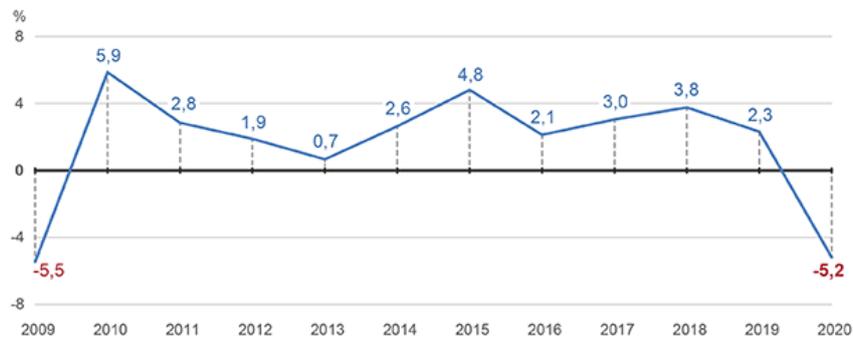


Figure 1 GDP development in Slovakia

Source: Statistical Office of the Slovak Republic (2021)

The growth of the price level in the Slovak economy was at the level of 2.7 % in 2019, which is 0.2 % more than in 2018. Thus, Slovaks could afford more goods and services from their wages year-on-year than in 2018.

The Slovak Business Agency (2020) states that the labour market was able to generate new jobs in 2019 as well. The average number of persons employed in the national economy increased by 1.0 % year-on-year and unemployment in 2019 fell to its historical lows, as stated in the Report on the State of Small and Medium-Sized Enterprises in Slovakia in 2019.

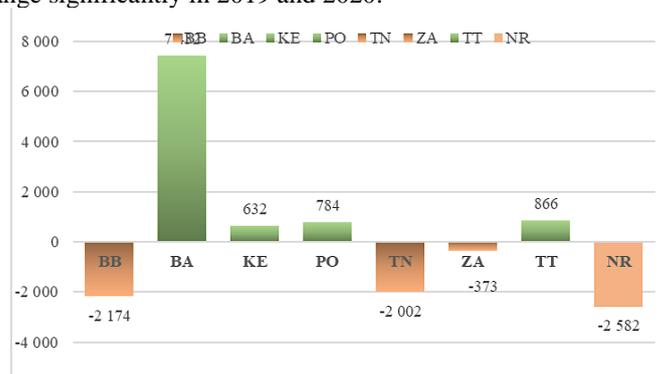
However, the year 2020 was completely different, unemployment rose to 6.7 %, at the end of the year there were 35,000 more unemployed year-on-year. The Statistical Office (SO) of the Slovak Republic informed about it at the beginning of March 2021 (2021). Unemployment has increased in all regions, but mostly in the eastern part of Slovakia, where Panta Rhei's stores are also located. The Statistical Office of the Slovak Republic (2021) states that the number of unemployed persons in the Košice Region increased by 9,700 to the level of 6,700 and in the Prešov Region by 7,400 to 50,400 persons. Both regions had the highest level of regional unemployment and recorded the highest increase.

The negative impact of the coronavirus pandemic is felt across sectors and has significantly affected the overall performance of the economy. Under the influence of restrictions, companies had to limit whether some would stop operating. Demand from customers also fell, which directly caused a drop in sales, and some companies had no choice but to further reduce their costs than lay off their employees. The loss of employment also caused changes in shopping behaviour; people had to re-evaluate their consumption. The situation on the labour market was deteriorating and, according to the Center for Labor, Social Affairs and the Family, the registered unemployment rate increased in April 2020 at the highest rate in history. The dynamics of unemployment growth gradually began to moderate in May and June. The obligation to work from home did not bypass the bookstore and almost all employees had to go to the home office.

2.3 Social and demographic factors

In the coming years, the Slovak market will have to cope with demographic changes that affect companies and the Panta Rhei bookstore (Dujava - Pécseyová, 2020).

The number of inhabitants in some regions where bookstore stores are located did not change significantly in 2019 and 2020.

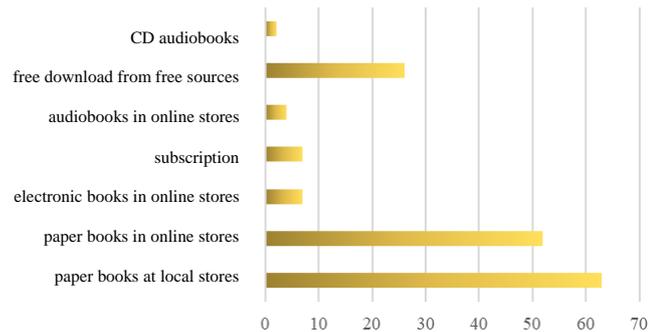


Graph 1 Population difference in 2019 and 2020

Source: Own processing according to the Statistical Office of the Slovak Republic (2021)

If we look at the difference in population, the highest increase was recorded in the Bratislava region. The change in the decline or increase in population also has an impact on bookstore sales.

The analytical team at Picodi.com (2019) also took a closer look at the preferences of readers in Slovakia and their shopping behavior in this segment literature and what are the consumer trends.



Graph 2 Book formats preferred by consumers in Slovakia

Source: Custom processing by Picodi.com (2019)

The year 2020 brought changes in various directions, which brought an increase in online shopping in several areas. This trend also applies to the sale of books themselves. Those who have not had a habit of shopping online have adapted and it is expected that in the coming years, online shopping, or the use of other alternatives to paper books will continue to grow.

2.4 Technological factors

The impact of technological changes is also clearly observable for the bookstore we have chosen. The book assortment is ideal for sale and promotion via the Internet or social networks. Progress is progressing and it is important to keep up. Having a perfect e-shop built is the key, especially if the competition is a few steps ahead of us. Technology also affects payment methods, which, even under the influence of the pandemic, have had to adapt better to the contactless method.

3 Research design

The collection of theoretical information was used at the beginning of the paper. We used data obtained from publicly available sources to analyse the effectiveness of individual bookstores' social networks. When forecasting sales, we collected historical data from the financial statements on the development of sales for the period from 2016 to 2019. We evaluated the data for the companies Panta Rhei and Martinus. In Excel, we used the data prediction function FORECAST.ETS., which based on the AAA version of the exponential adjustment algorithm predicted the development of sales based on data from the past (Tyrallis, et al., 2021). To compile a

clear model that considers the lower and upper limits of the forecast, we used the generation of visual output of the forecast. All graphs were created using MS Excel.

When analysing e-commerce tools, we analysed data from SimilarWeb. SimilarWeb is a site that provides web analytics services for businesses. We only worked with the free version, so we could only compare a limited number of indicators, in our specific case we used the data to compare traffic for the month of March 2021 within Panta Rhei and Martinus.

When processing the paper in the empirical part, we used the DEA method to evaluate the effectiveness of individual bookstores. The DEA method is a statistical method that evaluates our efficiency based on inputs and outputs. We performed the calculations within the analysis using MS Excel, where we chose the average number of photographic and video contributions within both monitored bookstores as inputs. We chose the average number of video views, the average number of "likes" per post, and the total number of followers (as of April 2021) as the outputs we want to streamline.

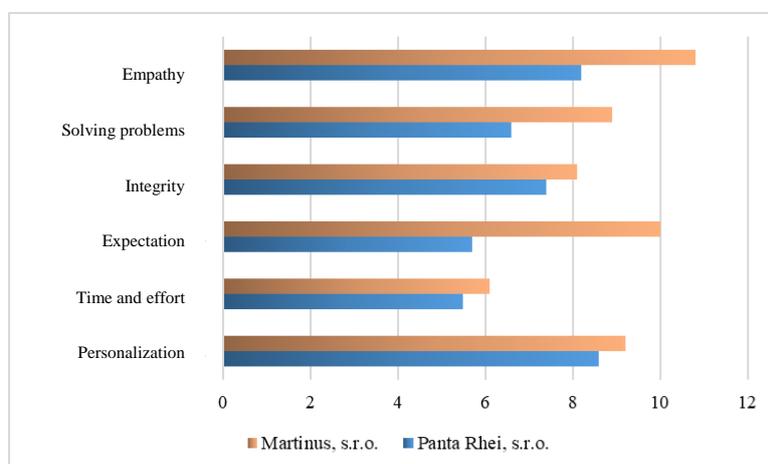
When calculating the DEA analysis, we used the MS Solver add-on, which works with changing decision variables; in our case, these were efficiency variables on individual Instagram accounts. Based on our chosen criteria, and the orientation of the model to maximize outputs, we have determined the limitations of maximizing outputs and minimizing inputs. We selected the appropriate solution method using a simplex algorithm and evaluated the achieved efficiency through a comparison of bookstores.

4 The Results and discussion

If we want to improve processes and move the business further, to adapt to the current situation and market trends, we must identify the starting points, where the company is located, where it sees the potential for change and where it wants to get and what it needs.

The biggest competitor for Panta Rhei is the Martinus bookstore, s.r.o. The preferences of these brands among customers also indicate this. These findings were the result of a new study of KPMG's customer experience (2020) in Slovakia. For the second time, Slovak customers have chosen the Martinus online bookstore as their most popular brand, and the second place belongs to the Panta Rhei bookstore. The customer experience survey is an interesting study of the experience of Slovak customers with brands with which they are clients or who have interacted with them in the last six months. The statements of almost 2,100 respondents from all over Slovakia were evaluated using the unique Six Pillars methodology developed by KPMG Nunwood.

To compare these pillars and their values within the Panta Rhei and Martinus bookstores, we constructed a graph based on which we can illustrate the differences between the bookstores.



Graph 3 Pillars and their comparison within the Panta Rhei and Martinus bookstores

Source: Own processing according to KPMG (2020)

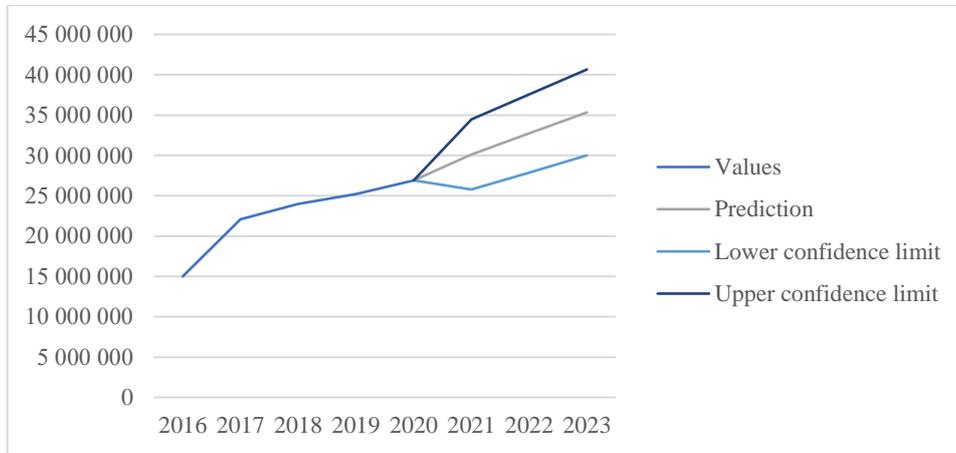
In every pillar, our biggest competitor - Martinus - has something on top. It should be mentioned that the survey was conducted on a sample of more than 2,000 respondents, which is not much, but enough to be able to imagine in which areas of customer perception our competitor is ahead of us.

In this subchapter, we will compare and evaluate the processes within individual companies and evaluate the indicators of financial analysis.

4.1 Prognosis of future development and current situation

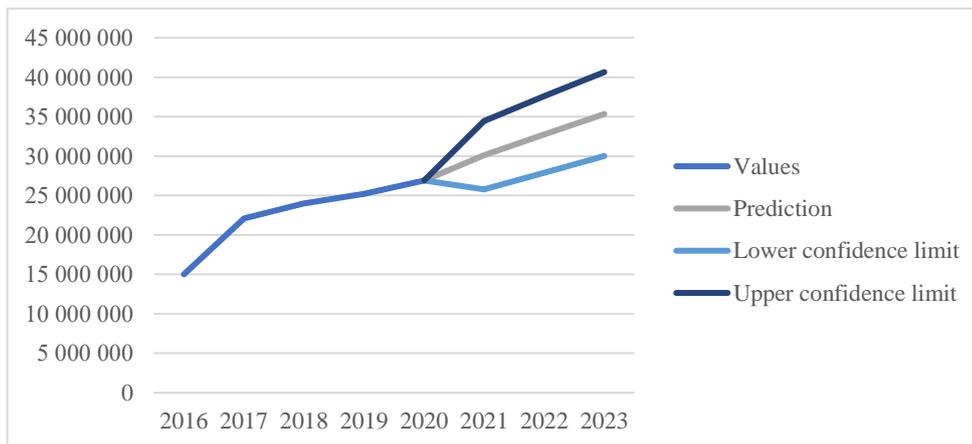
To forecast the development of sales, we used the function in Excel FORECAST.ETS, which calculated or predicted the future value of sales based on existing and past values.

The following chart shows the forecast of Panta Rhei's sales. As, based on data from previous years, there was an increase in sales every year, it could be expected that the increase in sales will continue in the coming years.



Graph 4 Pantarhei bookstore revenue prognosis
Source: Own processing

From the graph we can see the trend of sales growth throughout the prognosis period. Such a forecast based on historical data could predict revenue developments based on an algorithm. However, this algorithm does not account for and does not consider unexpected threats and environmental influences. It is not possible to evaluate the sales of both bookstores based on this model. Such a forecast could be relevant if external conditions did not differ from those in previous years. However, we know that the crisis and the overall coronavirus situation have affected and continue to affect many sectors.



Graph 5 Sales prognosis for Martinus bookstore
Source: Own processing

Even in the case of Martinus, it is possible to expect an increase in sales. We will find out whether the fair values at least approximately match those predicted by the model after the publication of the financial statements for 2020.

In April 2020, Panta Rhei announced that it had to lay off 30 employees during the first wave and dozens more in a later period, Bödök (2020), the owner of a bookstore network, said in an interview. The shortfall in sales at the beginning of the pandemic represented a loss of more than one million euros per month, mainly due to the nature of the costs, which are mostly fixed. Last year, sales increased in the second half of the year. This was mainly due to the increased interest in buying books through the e-shop. Despite large losses from the beginning of the year, the company expects an increase in sales in 2020. We will be able to verify whether this will really be the case by how much sales will increase and whether the prediction model has at least approached real values only after the publication of the company's financial results for the past year.

4.2 E-shop efficiency analysis

After comparing the traffic of e-shops via SimilarWeb, we can state that the traffic in the case of Martinus in March 2021 is at the level of over two million visits, while in February there was a decrease to the level of 1.6 million visitors. In the case of Panta Rhei, the numbers are much less favourable and on average over the last three months, e-shop traffic is just under 400,000. We record the highest traffic at both bookstores, of course in December, when people buy the most books.

The COVID-19 pandemic had a major impact on Slovak e-shops. According to the E-shop Barometer (2020) survey conducted by KPMG in Slovakia in cooperation with ui42, up to six out of ten online stores saw an increase in sales during this period. The demand for books is increasing during the pandemic, and the Panta Rhei bookstore network is aware of this. Panta Rhei CEO L. Bödök also thinks that sales in 2020 will exceed those a year ago, which were almost 45 million euros.

It is understandable that the largest share of visitors to e-shops of bookstores is from Slovakia, as the second most common source of visits is from both e-shops from the Czech Republic.

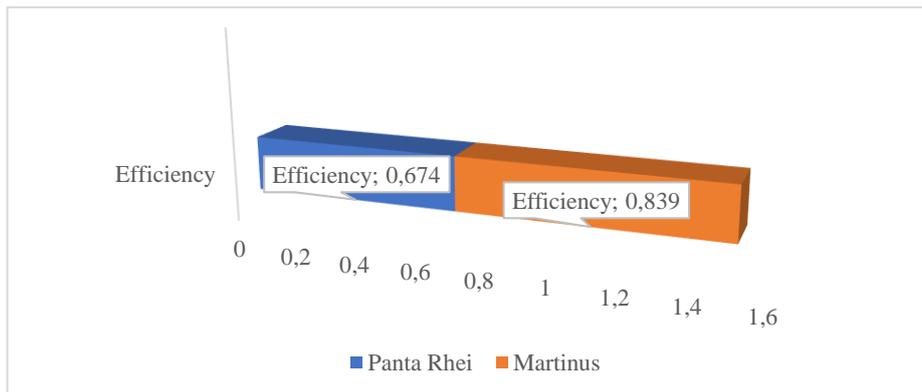
Table 1 E-shop traffic share by country

Panta Rhei		Martinus	
Slovakia	94,91%	Slovakia	93,22%
Czech Republic	2,84%	Czech Republic	2,44%
Hungary	0,47%	Germany	1,16%
Austria	0,41%	United Kingdom	0,62%
United Kingdom	0,28%	Switzerland	0,54%

Source: Own processing according to SimilarWeb (2021)

Subsequently, we evaluated the effectiveness between Panta Rhei and Martinus in the Instagram contribution activity. We used the DEA method - Data Envelopment Analysis. The data we used to apply this method are data freely available

from Instagram accounts. We selected the average number of photo posts and the average number of video posts as inputs, and we evaluated the average number of videos watched, the number of "likes" per post, and the total number of followers. The results of the DEA method gave us a result on efficiency on social networks, in this case on Instagram in favor of Martinus.



Graph 6 Comparison of the effectiveness of the accounts on the Pantarhei and Martinus Instagram (%)
Source: Own processing

The efficiency of the Pantarhei is about half that of the competition. Martinus has managed to build a strong brand and awareness on social networks. This is evidenced by the number of people it has captured across various online platforms. For Pantarhei, this could be an inspiration and motivation to further improve its reach on social networks. From the results of the DEA analysis, we can also evaluate the recommendations that the solution proposes. To increase the effectiveness of Instagram, it is recommended to contribute the same amount of photo posts, which is currently 27 posts per month and increase the average number of video posts by 1 per month to 3. To make Pantarhei more effective, it is recommended to increase the total number of followers from the current value of 28 thousand, at least to the value of 42.8 thousand.

In the beginning of the quarantine in connection with COVID-19 Martinus did not hesitate and reacted, you can say immediately, to the situation so as not to lose contact with his customers. Celebrities have started reading fairy tales via stream on Instagram or via YouTube channel. Pantarhei has not gone in this direction and may also result in fewer followers.

The goal of both bookstores is to bring readers the experience and emotion of reading, but the road to success is sometimes fickle. Pantarhei and Martinus would never be where they are now if they did not invest financial resources and human capital in turning their vision into reality. Although their business philosophies are different and each of them build on different pillars in their common interest is to be prosperous companies.

Panta Rhei is an example of the fact that, despite not being a market leader and innovator, it is constantly growing. An important aspect in the success of companies is the human capital on which they rely immensely. It may be a cliché, but the empathy and willingness of employees comes first in customer ratings. The company builds on this and builds its authenticity, and it supports this with the idea, "people first, then money." Quality in terms of internal processes is essential if we want satisfied bookmarks to return to the bookstore, not complaints and dissatisfaction on the part of consumers.

5 Conclusion

The business environment is characterized by the dynamics of changes that are constantly occurring in it. Globalization, internationalization, the virtual economy, all these concepts affect us every day and the world are changing due to these trends, we can say, minute by minute. The current environment in which we live requires the need to change and adapt traditional methods of management and business. The purpose of the final work was also to point out the fact that digitization and modern approaches and trends in business must apply to a company that wants to survive in the market and at the same time adapt to current events in the world (Bartik, 2020).

In today's world, every company, whether bookstore or chain store, must know how to use technology to its advantage. Even though Panta Rhei has been a stable bookstore for many years and has its own background, an unpredictable situation can arise, as occurred at the beginning of last year. Due to the measures, the companies had to close their gates and the employees suddenly stayed at home. If the company did not have any financial reserves and did not move the sale of books exclusively to the online space, sooner or later it would be liquidating for Panta Rhei. It is important to learn from crises and learn. The fact that Panta Rhei has been able to bridge over the period can be due to its customers, who have retained them through online shopping. It is in such a situation that the previous efforts to build a quality e-shop with all the support processes, which have now proved to be very important, have been fully demonstrated.

The result of the paper is a draft recommendation for Panta Rhei. Many of the recommendations are already well established in the bookstore, but we see the importance of continuous improvement as very important. The bookstore really relies heavily on its customer relationships and cares about preferences as well as feedback. Creating your blog is something new that could bring not only financial improvements to the bookstore, but especially the capture of a wider range and increase interest from customers. Compared to the obtained future value, the operating costs are really negligible.

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