Financial Performance Evaluation of Luzhou Laojiao Distillery Under the Background of High-quality Development of Liquor Industry

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Abstract: The Sichuan government has issued a series of policies and measures to ensure the high-quality development of spirits enterprises, based on the concept of high-quality development of the spirits industry. Luzhou Laojiao Distillery, as one of the representative enterprises of Sichuan spirits, has also undergone a number of reforms and breakthroughs. Based on the financial performance of Luzhou Laojiao Distillery over the last five years and using DuPont analysis, this paper studies the changes in financial performance of Luzhou Laojiao Distillery after reform, evaluates its development, and proposes reform suggestions to further promote the high-quality development of Luzhou Laojiao Distillery and provide some reference for enterprises in the same industry.

Keywords: Luzhou Laojiao Distillery, High-quality development, DuPont analysis.

1. Introduction

The China Alcoholic Beverage Association issued "Guiding Opinions on the Development of China Liquor Industry in the 14th Five-Year Plan" in April 2021, which summarised the achievements and faced situation of China's liquor industry in the 13th Five-Year Plan, outlined the strategic objectives and main tasks of liquor industry development in the next five years, and proposed specific safeguard measures and policy suggestions. The spirits industry, as one of Sichuan's pillar industries, has always been highly valued and cared for by the Sichuan government. To promote the high-quality development of the Sichuan liquor industry, the Sichuan Provincial People's Government deliberated and passed the "Several Measures to Promote the High-quality Development of the Sichuan Liquor Industry" in May of the same year, which outlined specific essentials and suggestions for the high-quality development of Sichuan liquor. Large state-owned holding enterprises such as Maotai, Wuliangye, and Luzhou Laojiao Distillery have responded to the call for reform and adjustment by implementing the aforementioned two policies. Use a variety of metrics, such as brand, quality, and category optimisation. Accelerate the outward expansion of the spirits industry, improve enterprise competitiveness, seize market resources, lead Sichuan spirits enterprises out of the adjustment period, and establish a new pattern.

Luzhou Laojiao Distillery is an important enterprise in the Sichuan spirits industry as a representative enterprise. This paper investigates the financial performance of the Luzhou Laojiao Distillery over the last five years using an appropriate performance evaluation method, as well as the high-quality development background of spirits enterprises. Changes in the financial performance of Luzhou Laojiao Distillery, and makes relevant suggestions to improve the financial performance of Luzhou Laojiao Distillery, which can serve as a model for other wine enterprises looking to improve their financial performance.

The evolution of China's enterprise performance evaluation system has primarily taken four forms: single to multiple, quantity to quality, simple financial evaluation to comprehensive strategic management evaluation. [1] Many performance evaluation methods exist from the planned economy stage to the new period under the new normal, such as DuPont analysis, economic value added (EVA), and balanced scorecard (BSC), among others. Each method of performance evaluation has its own emphasis and advantages, as well as some limitations. After thoroughly considering the situation of Luzhou Laojiao Distillery and the focus of this paper, this paper chooses DuPont analysis to thoroughly analyze and evaluate enterprise financial performance.[2][3]

2. High-quality Development of Liquor Enterprises

2.1. Modernization transformation

2.1.1. Sub-section Headings

Liquor manufacturing businesses are both traditional and modern in nature. We must scientifically coordinate the "three relationships" of inheritance and innovation, tradition and modernity, and change and invariability, and constantly satisfy people's yearning and pursuit for a better life with beautiful products and services, as well as better promote common prosperity with the fruits of modern development and assist the country's modernization. To make the liquor industry intelligent, networked, and digital, liquor enterprises should constantly improve the level of digitalization, accelerate the transformation and upgrading of the liquor industry, and combine information technology with traditional brewing technology. Create digital demonstration enterprises and intelligent production demonstration lines, and improve the integrated application level of information technology in process flow, manufacturing equipment, process control, and quality traceability. Apply 5G network, blockchain, big data, and Internet of Things technologies to all aspects of liquor production and sales.

2.2. Cultural transformation and development

We must persist in cultural empowerment and constantly promote the creative transformation and innovative
developed to encourage the high-quality development of liquor industry, we need to dig deep into cultural connotation, deepen cultural integration, strengthen cultural narrative and optimize cultural communication on the basis of doing a solid job in the development of liquor quality, safety and industrial scale, and combine the wisdom of modern science and technology to empower liquor industry with cultural soul, continuously enhance the "soft power" of liquor industry development and help liquor industry achieve high-quality development.[4]

2.3. International transformation and development

It should "go abroad" with a more "open" attitude, connect with the international community in standardization, marketization, and rule of law, and build an international standard system, product system, and expression system, so that China Liquor can better spread around the world and more beautifully show the new image of China's modernization development of traditional enterprises.

3. Background Introduction of Luzhou Laojiao Distillery

3.1. Introduction of Luzhou laojiao distillery

Luzhou Laojiao Distillery is the "originator of Luzhou-flavor" and the pioneer of Luzhou-flavor technology. The "Luzhou Qu Distillery in Sichuan Province" was established after the establishment of the People's Republic of China on the basis of 36 brewing workshops in the Ming and Qing Dynasties. The "Luzhou Qu Distillery in Sichuan Province" was restructured and listed in 1994, with a registered capital of 1,394.24 million yuan and total assets of 6.895 billion yuan. On October 25th, 1993, Luzhou Laojiao Distillery co., ltd. publicly issued shares, and on May 9th, 1994, it was listed on the Shenzhen Stock Exchange, becoming the first joint-stock enterprise in the national brewing industry and the first liquor listed enterprise on the Shenzhen Stock Exchange.

3.2. Luzhou Laojiao Distillery high-quality development and reform

Luzhou Laojiao Distillery insists on focusing on the development layout of "double brands, three strains, and big single products," which continuously enhances Guojiao 1573's high-end brand value, promotes the return of Luzhou Laojiao Distillery's value, and stabilizes the key price belt. At the same time, brand innovation drives development in the areas of youth, internationalization, and fashion.[5]

Luzhou Laojiao Distillery promotes high-quality enterprise development through five fronts: quality front, marketing front, brand front, talent front, and manufacturer front. On the quality front, Luzhou Laojiao Distillery actively promotes the expansion of high-quality wine production capacity in order to ensure that every drop of wine is brewed in solid state with pure grain. Luzhou Laojiao Distillery is home to more than 90% of the national protected cultural relics that are still producing wine in the entire industry. On the marketing front, Luzhou Laojiao Distillery has firmly implemented a competitive marketing strategy, and the main single product has been reinstated on the list of national famous wines. Guojiao 1573 maintains its lead, with Guojiao accounting for more than 60% of total sales. The terminal coverage of the Tequ and cellar-aged wine brands exceeded 8 billion, and the terminal coverage of the Touqu and Erqu brands exceeded 300,000. On the brand front, Luzhou Laojiao Distillery has significantly increased brand market influence, as well as achieved precise reach in circle communication and brand promotion. The company collaborated with the national sports delegation, FIFA World Cup Qatar 2022, China Opera, and others, and held the sealing ceremony and the international poetry and wine culture conference in succession, and the national tour cellar was continuously upgraded, and the museum was rebuilt. The company also communicates with the Shenzhen Chamber of Commerce and the Sichuan Chamber of Commerce, and it collaborates with high-tech firms like Huawei. In terms of talent, Luzhou Laojiao Distillery is still building a young marketing team and bringing high-quality brand services directly to consumers across the country. Companies follow the "national brand with national talents" strategy, establishing 33 marketing service centers and 23 talent training bases, and the number of sales personnel with a bachelor's degree or higher has risen to nearly 10,000. On the manufacturer's side, Luzhou Laojiao Distillery believes that "customer is team" and always stands with customers and collaborates. The company took the lead in implementing the direct pilot project, adhering to the strategy of "serving," "supporting," "protecting," and "wealthy businessmen," comprehensively promoted the complementary advantages of manufacturers, and accelerated manufacturer integration and three-dimensional channel construction.

Luzhou Laojiao Distillery has also achieved scientific and technological innovation, making full use of emerging technologies such as 5G, Internet of Things, and artificial intelligence, and has initially completed the construction of digital intelligence Luzhou Laojiao Distillery. Promote winemaking system digitalization, intelligence, and management refinement, accelerate the formation of digital management of the entire production process, and achieve high quality and efficiency.[6]

4. Financial Performance Evaluation

4.1. DuPont analysis method

DuPont analysis takes the return on net assets as the core, closely combines capital and income, and uses several main relationships to comprehensively analyze the financial situation of enterprises, which can be used to evaluate the profitability of the company and the return level of shareholders' equity. Financial ratios DuPont analysis method can decompose the return on net assets of enterprises into multiple financial ratio products step by step, which is helpful to analyze and compare the operating performance of enterprises in detail and in depth. Among them, the main financial indicators are:

- Net profit rate of sales = net profit/operating income
- Rate of Return on Common Stockholders’ Equity = Net interest rate on assets × Equity multiplier
- Net interest rate on assets = net profit margin on sales/asset turnover
- Namely: = net profit rate of Rate of Return on Common Stockholders’ Equitiesales × asset turnover rate × equity multiplier

 disproportion.
4.1.1. **Analysis of Net Profit Rate of Sales**

First and foremost, the net profit rate of sales is employed. The net profit rate of sales can reflect the income ability that businesses bring to businesses through sales over time, and it is an effective data expression form of business profitability. The higher the net profit rate of sales, the greater the enterprise's profitability. The following are the specific data for Luzhou Laojiao Distillery:

<table>
<thead>
<tr>
<th>Time</th>
<th>Operating income</th>
<th>Operating costs</th>
<th>Net profit</th>
<th>net profit margin on sales</th>
<th>Operating margin</th>
<th>Net interest rate of total assets</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>1,305,546.58</td>
<td>293,400.19</td>
<td>351,046.59</td>
<td>26.89%</td>
<td>77.53%</td>
<td>16.57%</td>
</tr>
<tr>
<td>2019</td>
<td>1,581,693.43</td>
<td>306,541.80</td>
<td>464,223.55</td>
<td>29.35%</td>
<td>80.62%</td>
<td>18.02%</td>
</tr>
<tr>
<td>2020</td>
<td>1,665,285.45</td>
<td>282,348.46</td>
<td>595,851.46</td>
<td>35.78%</td>
<td>83.05%</td>
<td>18.64%</td>
</tr>
<tr>
<td>2021</td>
<td>2,064,226.17</td>
<td>295,243.15</td>
<td>793,726.24</td>
<td>38.45%</td>
<td>85.70%</td>
<td>20.29%</td>
</tr>
<tr>
<td>2022</td>
<td>2,512,356.33</td>
<td>336,952.84</td>
<td>1,041,058.91</td>
<td>41.44%</td>
<td>86.59%</td>
<td>22.01%</td>
</tr>
</tbody>
</table>

The operating gross profit margin, net profit rate of total assets, and net profit rate of sales of Luzhou Laojiao Distillery2018 all showed an upward trend from 2018 to 2022, as shown in the above chart. In the context of high-quality liquor enterprise development, the profitability of Luzhou Laojiao Distillery has been improving through its own continuous reform and breakthrough. In 2022, Luzhou Laojiao Distillery's operating income exceeded 25 billion, the operating gross profit margin reached 86.59 percent, and the net interest rate on total assets exceeded 20 percent to 22.01 percent. The sales net profit rate was 41.44 percent. Even with the epidemic's impact, the net profit rate of enterprises' sales continued to rise steadily, indicating that Luzhou Laojiao Distillery can effectively deal with the market impact of the epidemic, ensure continuous profitability improvement, and promote enterprise high-quality development.

4.1.2. **Total assets turnover rate analysis**

The turnover rate of total assets is the ratio of operating income to average total assets over a given time period. It is an important index for examining the efficiency of enterprise asset operation, as it reflects the flow speed of all assets from input to output during an enterprise's operation period, as well as the management quality and utilization efficiency of all assets. In general, the higher the value, the faster the total asset turnover rate, the stronger the sales ability, and the higher the asset utilization efficiency. Simultaneously, in addition to the total asset turnover rate, accounts receivable
turnover rate and inventory turnover rate should be included, as this provides effective evidence of the reasons for the change in total asset turnover rate and allows for a more reasonable analysis of the change in total asset turnover rate.

The following are the specific data for Luzhou Laojiao Distillery:

Table 2. Analysis of Operating Capacity of Luzhou Laojiao Distillery from 2018 to 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating income (ten thousand yuan)</td>
<td>1,305,546.58</td>
<td>1,581,693.43</td>
<td>1,665,285.45</td>
<td>2,064,226.17</td>
<td>2,512,356.33</td>
</tr>
<tr>
<td>Average total assets (ten thousand yuan)</td>
<td>2,118,034.53</td>
<td>2,576,244.93</td>
<td>3,196,458.65</td>
<td>3,911,049.29</td>
<td>4,729,863.17</td>
</tr>
<tr>
<td>Total assets turnover rate (times)</td>
<td>0.62</td>
<td>0.61</td>
<td>0.52</td>
<td>0.53</td>
<td>0.53</td>
</tr>
<tr>
<td>Inventory turnover rate (times)</td>
<td>4.32</td>
<td>4.60</td>
<td>3.99</td>
<td>3.45</td>
<td>2.94</td>
</tr>
<tr>
<td>Accounts receivable turnover rate (times)</td>
<td>1,423.51</td>
<td>1,105.01</td>
<td>1,681.96</td>
<td>13,164.29</td>
<td>6,639.71</td>
</tr>
</tbody>
</table>

The above chart shows that, while the turnover rate of total assets at Luzhou Laojiao Distillery is relatively stable, it is declining overall, from 0.62 in 2018 to 0.53 in 2022. The turnover rate of inventory is similar to the turnover rate of total assets, with little overall change but a downward trend, whereas the turnover rate of accounts receivable has a wider change range, rising sharply from 2020 to 2021 before beginning to fall in 2022. Although the turnover rate of total assets at Luzhou Laojiao Distillery has decreased slightly, when the turnover rate of inventory and accounts receivable is considered, the turnover rate of assets at Luzhou Laojiao Distillery is not good, and there may be an issue with unsalable inventory. The epidemic's impact will also result in a decrease in the turnover rate of enterprises' total assets. During the COVID-19 epidemic, consumer demand for liquor fell off a cliff, affecting the entire liquor industry, resulting in unsalable inventory and a decrease in total asset turnover rate. In general, Luzhou Laojiao Distillery's asset utilization rate is declining, and its sales ability is deteriorating. Enterprises should adjust and improve in a timely manner so that their long-term sustainable development is not jeopardized.

4.1.3. Analysis of equity multiplier

The equity multiplier, also known as the equity multiplier, is the multiple of total assets that equals shareholders' equity. The greater the equity multiplier, the smaller the proportion of the owner's capital invested in the enterprise to total assets, and the greater the degree of debt of the enterprise; on the other hand, the smaller the ratio, the greater the proportion of the owner's capital invested in the enterprise to total assets, the lower the debt of the enterprise, and the greater the degree of protection of creditors' rights and interests. Simultaneously, by thoroughly examining Shanxi Fenjiu's asset-liability ratio, we can better investigate the reasons for the change in its equity multiplier. The following are the specific data for Luzhou Laojiao Distillery:

Table 3. Solvency Analysis of Luzhou Laojiao Distillery from 2018 to 2022

<table>
<thead>
<tr>
<th>Time</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total assets</td>
<td>2,260,492.96</td>
<td>2,891,996.91</td>
<td>3,500,920.38</td>
<td>4,321,178.20</td>
<td>5,138,548.14</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>548,071.70</td>
<td>936,523.81</td>
<td>1,182,733.39</td>
<td>1,507,452.09</td>
<td>1,705,668.64</td>
</tr>
<tr>
<td>Total owner's equity</td>
<td>1,712,421.26</td>
<td>1,955,473.10</td>
<td>2,318,186.99</td>
<td>2,813,726.11</td>
<td>3,432,879.49</td>
</tr>
<tr>
<td>Liquidity ratio</td>
<td>2.86</td>
<td>2.40</td>
<td>2.57</td>
<td>2.43</td>
<td>3.51</td>
</tr>
<tr>
<td>Quick ratio</td>
<td>2.26</td>
<td>1.87</td>
<td>1.96</td>
<td>1.76</td>
<td>2.23</td>
</tr>
<tr>
<td>Equity multiplier</td>
<td>1.32</td>
<td>1.48</td>
<td>1.51</td>
<td>1.54</td>
<td>1.50</td>
</tr>
<tr>
<td>Asset-liability ratio</td>
<td>24.25%</td>
<td>32.38%</td>
<td>33.78%</td>
<td>34.89%</td>
<td>33.19%</td>
</tr>
</tbody>
</table>
Overall, the asset-liability ratio and equity multiplier of Luzhou Laojiao Distillery increased, while the current ratio and quick ratio decreased at first and then increased. The current ratio of Luzhou Laojiao Distillery was always greater than two, and the quick ratio was always greater than one, indicating that the enterprise has strong short-term solvency, sufficient liquid assets to pay short-term debts, and the ability to conduct daily business operations. However, in 2022, the enterprise current ratio reached 3.51, and the quick ratio was 2.23, which was a bit high. Luzhou Laojiao Distillery should continue to optimize asset allocation and capital operation, avoid idle and waste of funds, and use idle assets rationally to increase income and improve efficiency. Long-term solvency is indicated by the equity multiplier and asset-liability ratio. Despite a downward trend in 2022, the asset-liability ratio is still higher than 24.25 percent and 1.32 in 2018. Luzhou Laojiao Distillery's asset-liability ratio has remained above 30 percent since 2019, peaking at 34.89 percent in 2021. Although it fell to 33.19 percent in 2022, it still shows that Luzhou Laojiao Distillery's financial leverage is increasing while its solvency is declining. However, the equity multiplier remained around 1.5, and Luzhou Laojiao Distillery's overall situation was still improving. Luzhou Laojiao Distillery could effectively control the debt situation of enterprises and reduce the risk of debt with the high-quality development background of the liquor industry and the support of government policies. Under the influence of the epidemic, the equity multiplier and asset-liability ratio continued to fall, indicating that enterprise solvency was good, enterprise development was stable, and debt risk was low.

4.1.4 Analysis of Return on Net Assets

The return on net assets is a comprehensive index, and it is also a commonly used index to evaluate shareholders' profitability. The higher the index, the higher the return from investment; The lower the return on net assets, the weaker the profitability of enterprise owners' equity, which reflects the ability of self-owned capital to obtain net income.

| Table 4. Analysis of ROE of Luzhou Laojiao Distillery in 2018-2022 |
|-----------------|----------|----------|----------|----------|----------|
| Time            |          |          |          |          |          |
| net profit margin on sales | 2018     | 2019     | 2020     | 2021     | 2022     |
| Total assets turnover rate (times) |          |          |          |          |          |
| Equity multiplier | 1.32     | 1.48     | 1.51     | 1.54     | 1.50     |
| Rate of Return on Common Stockholders' Equity | 21.88%   | 26.65%   | 28.15%   | 31.17%   | 32.95%   |

According to the data in the above chart, the ROE of Luzhou Laojiao Distillery increased by 11.07 percent between 2018 and 2022, reaching more than 30 percent in 2021 and increasing by more than 30 percent from 2018 to 2022. Despite the epidemic's impact on the overall environment of the liquor industry, the average return on equity of the liquor industry as a whole showed a general trend of decline, but Luzhou Laojiao Distillery maintained a
good net income ability. We can intuitively feel that the profitability of Luzhou Laojiao Distillery is developing well from 2018 to 2022, and the gap between it and the average value of the liquor industry is constantly increasing, which is 12.99 percent higher than the average value of the liquor industry in 2022, based on the trend in Figure 7. Furthermore, from 2018 to 2022, the growth rate of total assets of enterprises generally showed a downward trend, but the equity multiplier and net profit rate of sales continued to show a gradual upward trend, indicating that while the asset utilization rate of enterprises decreased, they still performed well in terms of profitability.

To summarize, against the backdrop of high-quality development of liquor enterprises, Luzhou Laojiao Distillery has shown a good development trend in profitability, with good solvency and ability to resist risks, but the enterprise's current ratio and quick ratio are on the high side, there are too many idle assets, and there are still shortcomings in operational capacity. Enterprise asset utilization is declining, and sales capacity is deteriorating. Businesses must adjust and improve over time.

Suggestions on the continuous and high-quality development and improvement of Luzhou Laojiao Distillery

Accelerate the application of intelligent manufacturing in production
Extend the application scope of 5G networks, big data, and the Internet of Things in the production and operation process, accelerate scientific and technological innovation, apply scientific and technological innovation to raw material pretreatment, special koji production, wine production, pit sealing, and other processes. Intelligent manufacturing can realize intelligent and automatic production by introducing simulation technology, automation technology, online detection, industrial robots, big data analysis, intelligent decision-making, and other technologies. This can improve the utilization efficiency of materials and the overall efficiency of liquor production. The implementation of intelligent manufacturing has resulted in the integration of production data, the formation of information traceability of all product links, the reduction of business communication time across all sectors, and increased work efficiency. Simultaneously, using the powerful analysis function, it can predict potential hidden dangers in each section, guide production planning, and finally improve product quality and realize high-quality development.[7]

Strengthen foreign cooperation of enterprises
Increase collaboration with universities, research institutes, and high-tech enterprises, and use new accomplishments and technologies to continuously improve their own capabilities. Strengthen the talent team's construction, take advantage of university collaboration opportunities, discover new talents, cultivate new talents, absorb new talents, constantly expand the talent team, and provide continuous human support for industrial development. Increase collaboration with scientific research institutes, improve screening, research, cultivation, and industrial utilization of brewing microorganisms, improve research, analysis, and comprehensive utilization of fermentation by-products, improve analysis and identification of liquor products, promote innovation and upgrading of brewing technology, and pay more attention to innovation in technical cross-fields. We should also strengthen our collaboration with high-tech firms, adopt new technologies and methods, optimize management and production, and achieve high-quality development.

Third, strengthen brand building and further enhance market influence
One of the most important elements in promoting high-quality economic development and increasing international competitiveness is brand. The first step is to create a corporate brand, which is represented by a business card. Enterprises should prioritize public services, fiscal revenue, financial support, infrastructure, and industry development, as well as assume social responsibilities and create a positive corporate brand image. Second, we must focus on the development of product brands, improve product quality, be customer-oriented, and constantly create new product brands. Finally, by effectively promoting the construction and development of brands in producing areas of "Sichuan Liquor," liquor enterprises are not only competitive, but also an organic whole, building and utilizing the advantages of producing areas, effectively promoting the construction and development of brands in producing areas of "Sichuan Liquor," and strengthening market influence.[8]

Fourth, build a liquor culture with obvious characteristics with cultural empowerment.
As the only Luzhou-flavor liquor that won the title of "China Famous Liquor" for five consecutive years, Luzhou Laojiao Distillery has a heavy sense of history. From 36 brewing workshops in the Ming and Qing Dynasties to today's Luzhou Laojiao Distillery Co., Ltd., it has experienced a long history. Since 1573 AD, it has been brewing continuously for 450 years. In 1996, it was promulgated by the state as the first batch of "national key cultural relics protection units" in the industry. The long history has left a profound cultural heritage for Luzhou Laojiao Distillery. It integrates liquor culture into products and brands, learns and communicates with new cultures, collides with western cultures, and tells the story of China in a language that can be heard and understood all over the world. Through the blending of poetry and wine, it provides more possibilities for the blending and collision between China culture and world culture. Enterprises should give full play to their own cultural heritage, constantly enhance the brand height, accelerate the brand upgrade with culture, and help the high-quality development of Luzhou Laojiao Distillery.

5. Conclusion
Luzhou Laojiao Distillery has experienced a series of reforms and innovations against the backdrop of high-quality development of liquor enterprises, and the entire enterprise has also demonstrated a trend of good development and steady high-quality development. However, some issues remain, such as slow inventory turnover and an excess of idle assets. This paper makes some immature suggestions in the hope that enterprises will accelerate the application of intelligent manufacturing in production, strengthen cooperation, strengthen brand building, and adopt culture in order to ensure the sustained high-quality development of enterprises.

Acknowledgment
This work was supported in part by a grant from Sichuan Science and Technology Department Soft Science Program Project (2022JDR0292)
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