

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

PROJECT 1 DONE BY :

- 1. FAISAL HAMID SHAIK**
- 2. BHUVAN SREE SAI REDDI**
- 3. SATYANARAYANA MEKARTI**

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

TABLE OF CONTENTS

EXECUTIVE SUMMARY PAGE 3

1. ITEM 1 PAGE 4 - 6

Describe and characterize the industry. In general, what is the scope and focus of the industry? What is the size of the industry? Is it growing? Shrinking? Who are the leading competitors in the industry? What are some of the main trends in the industry?

2. ITEM 2 PAGE 6 - 8

Define clearly what “intelligence” is in the industry? Does BI/Analytics play a role in this “intelligence”? How does it relate to overall competitive intelligence?

3. ITEM 3 PAGE 8 - 10

Address the following question: is the industry a leading adopter of BI/Analytics? Or is it lagging? Some questions to address to add support to your conclusion on if the industry is a leader/laggard: Where is the majority of the industry with relation to the Analytics Maturity curve? What are the main opportunities for the industry with respect to BI/Analytics? What are some of the issues the industry is facing with data/BI/Analytics?

4. ITEM 4 PAGE 10 - 11

Provide a conclusion highlighting your 3 main takeaways from your research.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

EXECUTIVE SUMMARY

THE CHOCOLATE INDUSTRY -

The commercial chocolate production cycle involves a wide range of individuals from cocoa growers to marketers and salespeople, who are all part of the global chocolate business. Harvesting cocoa beans, making chocolate, and selling, distributing, and marketing are the three main stages around which the industry is centered. Areas of Central America and Western Africa, cocoa beans, the raw material for chocolate, are farmed. A major challenge for the cocoa business is ensuring the proper treatment and payment of employees on cocoa farms.

This research delves into the state of Business Intelligence and Analytics adoption in the chocolate industry. The industry can be described as being in a mid-level position on the Analytics Maturity curve, neither leading nor trailing. Larger, established companies have embraced data-driven decision-making by implementing BI tools, while opportunities for further advancement are apparent. We discuss about the significant opportunities lie ahead, including gaining insights into consumer preferences, optimizing supply chains, and ensuring quality, ethics, and sustainability. These opportunities extend to improving operational efficiency, pricing strategies, and targeted marketing. However, during this research, we got to know that challenges persist. The industry grapples with data quality, skills gaps, integration complexities, security, costs, and compliance. The adoption of advanced analytics techniques can be daunting. Ethical considerations and the need for real-time adaptation pose ongoing challenges.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

ITEM - 1

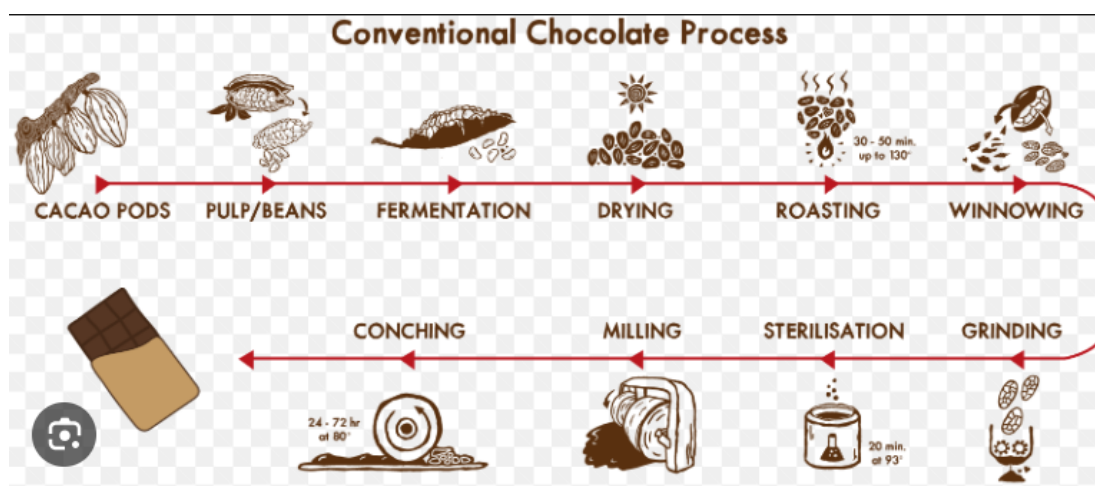
Describe and characterize the industry. In general, what is the scope and focus of the industry? What is the size of the industry? Is it growing? Shrinking? Who are the leading competitors in the industry? What are some of the main trends in the industry?

CHOCOLATE

Chocolate is basically a food item which is made from roasted and ground cacao seed kernels. These seed kernels can be available as liquid or solid.

CHOCOLATE INDUSTRY

The chocolate industry is all about making and selling chocolate products. You can find all kinds of chocolate, from regular chocolate bars to fancy truffles and cocoa powder for baking. It is a big business worldwide, with big companies like Mars, Mondelez, and Nestlé leading the way. Lately, people have been really into high-quality and special chocolate made by small, local businesses. Dark chocolate is popular because it has less sugar and might be beneficial for health. Some chocolate makers care about where they get their cocoa beans and try to be more eco-friendly. They're also coming up with new flavors and ways to make chocolate. The chocolate industry keeps changing fast.

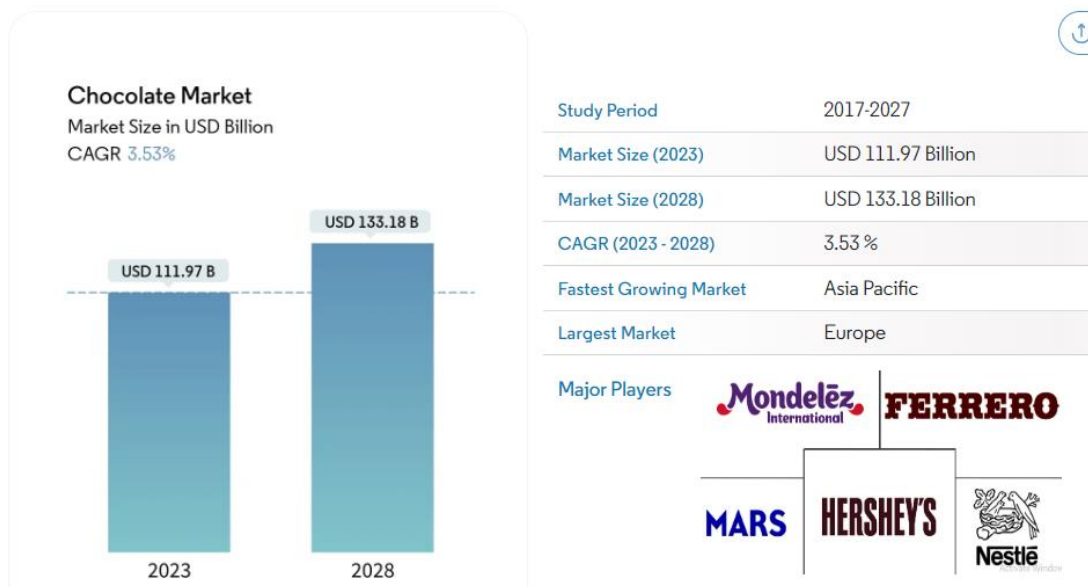


EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

SIZE? GROWING ? SHRINKING?

The global chocolate industry is big and huge and is growing, which was valued around \$130.56 billion in 2019. It's expected to keep growing at a rate of about 4.6 percent each year, reaching about \$187 billion by 2027. In the United States, people spend about \$30 billion on chocolate every year, with milk chocolate being the favorite. Chocolate comes in many forms, from bars and candies to cookies and ice cream. It's not only a tasty treat, but also linked to some health benefits. This industry is a major employer, with thousands of people working in chocolate and related businesses.

(<https://smallbusiness.chron.com/large-chocolate-industry-55639.html>)



Chocolate Market: Market Size (%), Global, 2021



EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

COMPETITORS IN INDUSTRY

The leading competitors in the chocolate industry represent a mixture of multinational companies and smaller artisanal producers. Among the global giants, Mars, is a company that stands out with a portfolio of well-known brands, including Mars, Snickers, M&M's, and Dove. Mondelez International, another major player, has brands like Cadbury, Toblerone, and Côte d'Or. Nestlé, a global powerhouse, offers a range of chocolate products, including Nestlé Crunch, Kit Kat, Aero, and Milkybar. The Ferrero Group, known for its Ferrero Rocher, Nutella, Kinder, and Mon Chéri brands, is recognized for its hazelnut-based chocolates. In the United States, The Hershey Company plays a significant role, owning brands such as Hershey's, Reese's, Kit Kat, and Twizzlers.

(<https://www.marketsandmarkets.com/Market-Reports/cocoa-chocolate-market-226179290.html>)

MAIN TRENDS

The chocolate world is changing rapidly. People want fancier and healthier chocolate, like dark chocolate and Plant-Based Chocolates. Smaller local companies are making these special chocolates with good ingredients. They also care about the environment. Chocolate is getting more creative with new flavors and healthier options. You can even buy chocolate online. So, chocolate is not just tasty but it is also about being healthy, eco-friendly, and fun!

(<https://www.itac-professional.com/en/blog/chocolate-confectionery-trends/>)

ITEM - 2

Define clearly what “intelligence” is in the industry? Does BI/Analytics play a role in this “intelligence”? How does it relate to overall competitive intelligence?

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

INTELLIGENCE

In the industry mentioned above, there are two types of intelligence involved i.e., Business Intelligence (BI) and Competitive Intelligence. These forms of intelligence are used to gather,

analyze, and apply data and information decision making and to gain a competitive edge in the market.

These intelligence encompasses market trends, consumer preferences, supply chain management, and financial data, all of which contribute to data-driven decision-making and process optimization for maximum revenue generation. Competitive Intelligence focuses on understanding and analyzing information regarding competitors in the chocolate market. This includes studying their (competitors) strategies, product portfolios, pricing techniques, and market positioning to gain a competitive advantage. In this industry, both BI and Competitive Intelligence are intertwined, as BI tools and analytics help collect, organize, and analyze data for internal decision-making, while Competitive Intelligence relies on similar methods to assess external market dynamics and competition. Some of the other intelligence which include are quality intelligence, ethical and sustainability intelligence, and consumer insights, which are important for evolving chocolate industry .

Does BI/Analytics play a role in this “intelligence”?

Yes, Business Intelligence (BI) and Analytics play a pivotal role in the intelligence processes within the chocolate industry.

In the chocolate business, tools like Business Intelligence (BI) and Analytics are game-changers. They help the chocolate makers collect and understand important information. For example, they gather data on how much chocolate is being sold and what people like to buy. This information helps the chocolate companies make better decisions. These tools are very much important for the business. They help the chocolate makers make yummy chocolate, set the right prices, and make sure everything is done well. They also help companies make decisions quickly when things change in the market. So, in the chocolate world, BI and Analytics are important to be successful.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

How does it relate to overall competitive intelligence?

Business Intelligence and Analytics are closely connected to the broader concept of Competitive Intelligence. . BI helps in collecting data on various aspects of the chocolate business, from production and sales to consumer behavior, whereas Competitive Intelligence focuses on understanding what competitors are doing. By the help of competitive intelligence, companies can keep a watchful eye on competitors, scrutinizing their strategies, products, pricing, and market positions. This information is invaluable for staying competitive and responding effectively to changes in the market.

ITEM 3

Address the following question: is the industry a leading adopter of BI/Analytics? Or is it lagging? Some questions to address to add support to your conclusion on if the industry is a leader/laggard: Where is the majority of the industry with relation to the Analytics Maturity curve? What are the main opportunities for the industry with respect to BI/Analytics? What are some of the issues the industry is facing with data/BI/Analytics?

Is the industry a leading adopter of BI/Analytics? Or is it lagging?

The chocolate industry is not typically considered a leading adopter of Business Intelligence (BI) and Analytics when compared to some other industries like technology, finance, or healthcare. However, this doesn't mean that the chocolate industry is lagging significantly.

Many larger and more established chocolate companies have recognized the value of data-driven decision-making and have implemented BI and Analytics tools to varying degrees. They use these tools to optimize their supply chains, monitor production processes, analyze sales data, and gain insights into consumer behavior.

So, while the chocolate industry may not be a pioneering adopter of BI and Analytics, it is gradually recognizing their importance and is increasingly incorporating these tools into its operations.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

Analytics Maturity Curve

The majority of the industry is likely in the early to middle stages of the Analytics Maturity curve. While some larger and more established chocolate companies have implemented BI and Analytics tools to optimize specific aspects of their operations, there is still room for growth. Many smaller and artisanal chocolate makers are in the early stages of embracing data-driven decision-making.

Many smaller and artisanal chocolate makers are in the early stages of embracing data analytics which are collecting basic sales and production data but have yet to implement advanced analytics tools.

Some of the Larger and more established chocolate companies have moved further along the maturity curve and are in the mid-range of Analytics Maturity curve.

A very small segment of the industry, often represented by larger global corporations, may be pioneering in the use of analytics. They utilize cutting-edge technologies, including artificial intelligence and machine learning, for various applications.

OPPURTUNITIES

The chocolate industry holds several opportunities through the use of Business Intelligence/Analytics.

Firstly, these tools provide the means to gain insights into consumer preferences, allowing chocolate companies to create products that align with the desires of their target audience. This not only boosts sales but also cultivates customer loyalty.

Secondly, the optimization of the supply chain is a major opportunity. Analytics can streamline the entire process, reducing costs and ensuring chocolates reach consumers efficiently while maintaining product quality. So Quality Control is also an opportunity where the company can manage product quality and can prevent defects and uphold rigorous standards.

ISSUES

The chocolate industry encounters several challenges related to data, Business Intelligence (BI), and Analytics.

Data Quality is an issue where ensuring that the data to be accurate and significant is difficult. Data from various sources, such as supply chains and customer interactions, may be unorganized and of varying quality, making it challenging to draw meaningful insights.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

Many smaller chocolate companies may lack the necessary expertise and resources to effectively implement BI and Analytics solutions. So Hiring skilled personnel and training existing staff can be costly.

Integration of BI and Analytics tools into existing systems is also a big issue and is challenging for older or smaller businesses.

Data Security is too a challenge. Protecting sensitive consumer data and proprietary recipes is crucial. The industry must invest in strong security measures to safeguard this information, so that it is safe from cyberattacks.

While real-time Analytics can offer a competitive edge, it can be challenging for companies(majority of small industries) to adapt quickly to changes in the market.

(<https://www.fortunebusinessinsights.com/industry-reports/cocoa-and-chocolate-market-1000750>)

(<https://irely.com/supply-chain-disruptions-biggest-concern-for-chocolate-industry/>)

ITEM : 4

Provide a conclusion highlighting your 3 main takeaways from your research.

CONCLUSION

From the research conducted on the chocolate industry and its utilization of Business Intelligence, and Analytics, three main takeaways emerge as:

Moderate Adoption of BI and Analytics

Promising Opportunities for the industry

Persisting Challenges

The chocolate industry finds itself in a moderate position regarding the adoption of Business

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY

Intelligence (BI) and Analytics, neither leading nor trailing the curve. Many established companies, particularly larger ones, have acknowledged the importance of data-driven decision-making and have integrated BI tools to enhance their operations. Opportunities in the chocolate sector are promising. BI and Analytics offer avenues to gain a deeper understanding of consumer preferences, streamline supply chains, and uphold product quality. Moreover, there is potential for optimizing operations, pricing, and marketing also.

However, persistent challenges must be addressed. Issues like data quality, skills gaps, integration complexities, security, and costs pose obstacles to adopting more advanced analytics. Ethical considerations and the need for swift adaptation to market changes are additional hurdles that the industry faces.

EXPLORING BUSINESS INTELLIGENCE AND ANALYTICS LANDSCAPE IN CHOCOLATE INDUSTRY