

# FOOD & BEVERAGE MANUFACTURING AUSTRALIA

# 2021 STATE OFTHE MARKET

Sponsored by SIEMENS

# CONTENTS

Introduction01
How The State Of The Market Report Was Compiled02
The Pandemic Power04
Key Trends
Business Impact09
Business Challenges11
Business Objectives
Modern Manufacturing Strategy15
Looking Ahead16
Appendix: Industry Case Studies



# INTRODUCTION

The events of 2020 had a significant impact on the Food & Beverage Manufacturing industry. The industry as a whole faced a number of challenges, and the way the industry responded during this time will impact their strategy in the years ahead. Despite a tumultuous 2020, the Food & Beverage industry has performed extremely well and is recognised as one of Australia's six core industries for growth.

This 2021 State of the Market report into the Australian Food & Beverage Manufacturing industry has been compiled using firsthand interviews with key players in the market. Respondents' answers have been thoroughly analysed and this report covers the key trends that have affected the industry, focusing on the issues that have been most impactful, and as such, deserve most consideration.

The report looks at the key challenges faced by businesses in the Food & Beverage Manufacturing sector and outlines the most effective business responses, as well as their outlook for 2021. In particular, it looks at the impact of government intervention, specifically the Modern Manufacturing Strategy to outline what this means for businesses in the sector and provide a benchmark of what peers in the industry are planning in the coming months and years.

The aim of the report is to give businesses in the Food & Beverage Manufacturing sector a snapshot of the industry at this current point in time that they can use to strategically plan for 2021 and beyond.

# HOW THE STATE OF THE MARKET REPORT WAS COMPILED

The State of the Market report has been supported by Siemens in conjunction with the Private Label Manufacturers Association (PLMA). Over 1,000 of the top Food & Beverage Manufacturers were contacted over a two-month period during February and March 2021 to complete a survey about their business.

The questions covered a broad range of topics such as their business performance & strategy, external influences, and the Modern Marketing Strategy.

It is important to note that this was still a tumultuous time for businesses across Australia. Victoria had recently come out of its significant lockdown and New South Wales and Queensland had just recovered from their own snap lockdowns. As such, the difference in some of the respondent's answers and attitudes fluctuated considerably across the research period.

PLMA members and other industry leaders were invited to participate in the survey. The breakdown of respondents to this survey is as follows:

- Total complete responses: 107
- PLMA member responses: 31
- Non-member responses: 76

Respondents came from a wide range of segments within the Food & Beverage Manufacturing industry, including:

- Dairy, Meat & Fish
- Fresh produce
- Deli and Refrigerated
- Grocery
- Frozen and Pre-Packaged
- Bakery
- Snacks & Confectionary
- Alcohol & Specialist Beverages.





Respondents were primarily based in Australia, across all states and territories, with five responses coming from New Zealand.

To achieve a comprehensive understanding of the market, respondents were asked a series of qualitative and in-depth questions.

These results are not statistically significant but focus on detailed insights that resonate with the industry as a whole.

"We increased communications with staff and customers, worked with our suppliers to give as much forecast as possible and held more stock than usual.

# THE PANDEMIC POWER

For anyone who experienced the turbulent changes of 2020, there would be few surprises in most of the responses. Like many other industries, the Food & Beverage Manufacturing sector has never witnesses an impact like the Covid-19 pandemic, and the resulting government responses to managing the spread of the disease. However, for many companies, the myriad of changes to business, work, home and consumers had significant upsides.

Just over 12 months ago, COVID-19 seemed to be an overseas issue; however, it quickly made its way to Australia, and governments, businesses and individuals had to act fast. The farreaching effect of pandemic-related regulation and responses, and the interconnection between facets of person and professional lives have been felt in the most unusual places.

### Slave to the consumer?

While the consumer may be king, in 2020 it seemed that businesses became slaves to quickly-changing whims of consumer sentiment. Initial reactions to government lockdowns were illogical, with demand for certain non-perishable foodstuffs and other essentials vastly outstripping supply. The retailers' challenge with replenishing empty shelves expedited the issues.

But after the initial fluctuations for the majority of the Food & Beverage industry, demand increased significantly on previous years. Reductions in travel, eating out and the requirements to live at home in quarantine or lockdown created a surge in demand for the industry.

### **Slave to legislation?**

Curious consumer behaviour stemmed from government legislation and regulations that often seemed illogical. The feedback we received from businesses in the industry, is that their strategy for the past 12 months has been entirely shaped by decision-making, often, out of necessity, on a whim after changing government policy in response to the pandemic.

So many decisions in 2020 had to be made extremely quickly, based on vague advice and a lack of prior experience. What's more, these decisions had to be implemented with very little time for preparation. It's these decisions that have formed a particularly interesting aspect of this study.

"A lot more people resources and our business had to carry higher inventory of critically difficult-tosource ingredients.

For Food & Beverage businesses servicing directly to the consumer, growth has been exceptional. However, the collapse of the hospitality sector and other retail businesses has had an extremely negative impact on other suppliers. Separating the responses based on their industry and outlook presented two clear streams of insights. However, despite having a vastly different experience of 2020, both of these business types have similar outlooks for navigating 2021.

Over the past 12 months, economic outlook has changed as much as the economy itself. The lockdown and resulting legislation initially caused the Australian economy to suffer significantly. This was exacerbated by the limiting of international trade and travel (of migration and for tourism).

But as control was exerted over the pandemic in most cases, many segments of the economy bounced back quickly. What is striking about the responses to the study is common sentiment for optimism by most, irrespective of how the segment they supply was affected.

# KEY TRENDS

### **Trend 1: Business Confidence is High**

Despite the challenges of the past 12 months, business confidence across the Food & Beverage Manufacturing industry is extremely high, at a staggering 93%. In comparing this data to that of the last equivalent study conducted of the financial services industry in 2019, where business confidence was at 84%, one thing is clear: the glass is not half-full, or half-empty.

For almost everyone in the Food & Beverage Manufacturing sector, it's overflowing. This is consistent with overall business confidence across sectors, as the NAB Business Index shows that business confidence in March 2021 is the highest it has been in the last 3 years.

This may seem somewhat of a contradiction after the difficulties businesses have faced over the past 12 months. But rather than feeling beaten and broken down by what has happened, survivors feel robust.

They have identified problems (or perhaps more accurately, problems were identified for them, and they responded. Businesses have gained new-found confidence in their ability to overcome challenges, and have laid the groundwork for what they hope will be future success.

### Trend 2: For Better or Worse, Adapting is Necessary

The second trend that was recorded in the survey is somewhat less surprising: being forced to adapt is easier when it's for a positive. In the past 12 months, businesses across the Food & Beverage Manufacturing sector fell into two distinct segments: the fortunate, and the not so fortunate. For the fortunate, business thrived as a wealth of new opportunities were presented. For the others, it has been a time of unprecedented challenges.

"Adapting to changes at a quicker pace, wider scoped contingency plans to deal with pandemic impacts.



The survey interviewed respondents from both the fortunate and unfortunate segments, and found that while cost-reductions and growth opportunities applied across all segments, taking a closer look at the data told a very different story between segments.

Both segments had to deal with the same external challenges but while the fortunate segment could focus on investment, increasing profitability and growth opportunities, the other had to deal with cost-reductions and efficiencies above all else.

### Trend 3: The Pandemic May be Over But its Affect Lives On

The third notable trend is linked to the second. In 2020, external forces impacted businesses in a way like never before. Businesses had to significantly change their business operations and plan differently in order to keep up with ever-changing regulations.

Strategic focus in 2021 remains based on those changes from 2020: profitability, efficiency, and growth opportunities. According to the data, at least two of the three strategic plans for Food & Beverage businesses in 2021 draw from what they learnt or did in 2020, responsive to Covid-19.

# BUSINESS IMPACT

"Agility in decision making and proactive communication to staff to ensure they know what is expected.

Manufacturing Australia State of the Market 2021

# BUSINESS CHALLENGES

Covid-19 is now contained, in Australia at least. However, going into 2021, businesses will continue to feel the knock-on effect of the pandemic, which will be the cause of a number of business challenges.

## **Challenge 1: The Unlinked Supply Chain**

Covid-19 presented logistical challenges like never before, with every facet of the logistics industry impacted; from importing and exporting, to mailability of raw materials and resources, and managing the availability of people in the sector. All of these factors had a significant impact on availability times for businesses across the Food & Beverage Manufacturing sector, which resulted in a scarcity of certain products.

This scarcity drove panic buying and a hyper-demand for products that could not be met. While the impacts of the pandemic have subsided and logistics companies and divisions are better equipped to manage these issues, the supply chain will remain a challenge for Food & Beverage businesses in 2021.

# Challenge 2: Swimming Against the Retailer Tide

During the Covid-19 lockdown, the role of the retailer as an 'essential service' significantly changed, creating new relationships and new opportunities, as well as challenges for retailers as they diversified. While grocery shopping was once another chore that we had to fit into our busy lives, during lockdown the role of the humble retailer significantly changed.

With nowhere else open and nowhere to go, it became a treat for consumers to visit their local IGA or Coles. Demand increased for certain products as consumers started cooking and baking more, which, on occasion, led to empty shelves while retailers struggled to keep up with demand. Consumers visited these stores with the expectations that they had products to sell. However, on many occasions, this resulted in disappointment, and a necessity for the consumer to change their product choice, or chase it down elsewhere.

# Challenge 3: Shipping Disruptions and Difficult Distributions

While similar to the above, this issue was mentioned by several respondents as a specific issue over and above general supply chain issues. Ever-evolving regulations and quarantine requirements coupled with consumer-driven demand for online purchases meant that importing and exporting products became increasingly difficult.

Throughout the course of the pandemic, retailers experienced bottlenecks in transporting both in and out of the country as the transport demand for products increased.

### Challenge 4: The People Problem

Abattoirs may have taken the brunt of media attention as Covid-19 hotspots, but there were issues for many. Establishments that were not completely closed down had a number of staff issues to manage; from a necessary change to OH&S requirements, to staff availability issues.

For manufacturing businesses in particular, responding to social distancing regulations also presented a challenge. Typically, efficient manufacturing process and factory layouts do not match with social distancing, nor are they easy to change.

# BUSINESS OBJECTIVES

All of the following objectives need to be managed carefully, as businesses have to be able and agile to respond to varying external factors, as well as minimise the risk associated with change.

### **Objective 1: Managing Variables**

2020 has highlighted a need for businesses to be able to manage variations and adjust schedules with very little notice. In order to succeed into the future, business owners know that they have to be able to respond to a variable environment and economy; from people to raw materials or supplies.

Businesses know they have to adapt according to supply availability. Not being able to rely on delivery schedules as easily has meant that it's more important than ever for businesses to be able to adjust their production schedules. If a material or product is not available, businesses have to be agile in updating their manufacturing process to a different product or position in order to minimise downtime. Alternatively, businesses may have contingency plans in place to switch supply or supplier so that they can meet manufacturing processes.

In addition, better management of people and processes has become critical. Staff scheduling is now more difficult due to varying shifts based on production schedules or responding to changes in demand.

"Strengthening availability of our range to meet the increasing demand from changed eating behaviours and occasions.



### **Objective 2: Staffing Management**

While staff scheduling is one issue, OH&S is becoming more important than ever. Social distancing requirements are likely to stay in place for a long time to come, which will have a significant impact for businesses across industries going forward. These changes have led to staffing management taking on a whole new identity: changing shift work, staff ratios and efficiencies have become (and will likely continue to be) the new normal.

### **Objective 3: Changes in Consumer** Choice

The shift in consumerism and consumer choices has been significant. For businesses in the Food & Beverage Manufacturing sector, being able to match these changes is critical to their financial recovery, as well as to take advantage of further growth opportunities. Behavioural change or adaption was a necessity, and consumers started to focus on food and beverages as other items became obsolete or difficult to acquire. Businesses in the Food & Beverage sector will have to continue to adapt to meet new demand. In some cases, the most effective way for businesses to meet the objectives of changing consumer choice will be experimenting, developing or pivoting to new products, segments or variations.



# MODERN MANUFACTURING STRATEGY

The nucleus of the idea of the state of the market study was the Federal Government's focus on food and beverage as one of the core sectors for growth. The Modern Manufacturing Strategy was launched with much fanfare. In fact, the only sector to perform better than the Food & Beverage industry was possibly the PR and communications sector.

The Modern Manufacturing Strategy was heralded as an opportunity for the industry to minimise some of the risk in innovation with government financial support across three criteria. It was seen as a positive step as it was industry-led. However, six months later and that sheen has worn off.

The sceptics have said from the beginning that any government intervention other than tax cuts of benefits is doomed to fail. Arguably, they're not wrong. Most businesses in the sector remain misinformed about the Modern Manufacturing Strategy, and as such, it's gone under-appreciated across the industry.

The majority of Food & Beverage businesses do not recognise the opportunities for support of funding, or understand how they can align with their own initiatives. Through a lack of understanding or belief that they are eligible, many businesses will carry on regardless but end up as accidental recipients of the policy funding.

Regardless of the obstacles, the Modern Manufacturing Strategy does represent over \$1.3bn of funding available to industry participants, and is something that businesses should take note of for their strategic planning.

"It needs focus on what it should support: efficiency and productivity. Instead it just seems to be set up to increase employment.

# LOOKING AHEAD

Investment and investment intention in the Food and Beverage sector is up significantly. This will allow businesses across the industry to focus on innovation, adopt acceleration, leap towards agility, and integrate technology across the supply chain.

# What will result is a stronger industry that is better equipped to handle future challenges.

Despite strong performance in 2020, all businesses faced a number of challenges as a result of the Covid-19 pandemic. Now, having weathered the storm, businesses feel stronger and ready for any challenges that may be thrown their way in 2021. This positive attitude is particularly prevalent when looking at business forecast for the year ahead.

### 1. Investment Up

The key strategic focus of many respondents is on investment in business processes and technology. Businesses are looking to use their investments in two key areas.

First, they want to take advantage of positive consumer behaviour changes that occurred in 2020 that are likely to continue into 2021 and beyond. Secondly, businesses are working to become more agile, and responsive to changes in the business environment, supply chain and variations in demand.

"We saw the importance of adopting new technology and better mechanisation.

#### 2. Focus on Innovation

Greater adoption of technology goes hand-in-hand with innovation in the Food & Beverage industry. Businesses will take advantage of technology that can assist with a number of processes:

- Scheduling: Moving from traditional methods of scheduling such as excel spreadsheets or HR/payroll software to a more technical, robust way to manage staff timetables, production and forecasting production.
- Managing variables in production process: Using simulation technology to forecast changes and consider the affect these changes will have on the manufacturing process or production timetables. This will, for example, allow businesses to switch production depending on availability of raw materials.
- Linking R&D to Production: Minimising risk of new products development negatively impacting the overall manufacturing process.

### **3. Adoption Acceleration**

Taking advantage of today's consumer behaviour, where consumers are more used to change than ever before. No toilet paper at Coles? Try IGA or look for a different brand. Have to work from home? Try Zoom. Try Teams. Try WebEx.

### 4. Jump Towards Agility

Businesses have realised that they can adopt change more easily than anticipated. The lessons learnt and the confidence gained will continue into 2021 and beyond.

These changes will coincide with changes in consumer behaviour, as businesses respond to a higher demand for F&B, an increased adoption of technology more, and an expectation that they may have to switch to new products depending on availability).

## 5. Technological Integration Across the Supply Chain

While all Food & Beverage businesses currently use some form of technology, they are looking for greater integration of this technology across the entire supply chain in order to better manage variables. Technology can be used to benefit a number of processes, such as tracking raw materials and supplies, or sourcing local alternatives.

# We have learnt that despite overcoming a difficult year in 2020, this is not the time to rest.

There is no time for complacency and the most successful businesses in the Food & Beverage sector will maintain the momentum of change. The businesses that will thrive in the future are those that continue down the path of innovation, and focus on three key areas of their business:

- better planning,
- better technology integration, and
- better process agility.

All of these can be achieved through the Modern Manufacturing Strategy. Businesses should consider how to best adapt and get the support that is required to make the necessary changes and improvements that will allow them to thrive in a post-Covid world.

# APPENDIX

How Siemens has helped food and beverage manufacturers embrace digitization:

The Absolut Company
Chocolates Valor



Consumer products and retail

# The Absolut Company

World-class manufacturing with Siemens manufacturing operations management

#### Product

Opcenter

#### **Business challenges**

Maintain world class at all levels, including product development

Comply with changing regulations

Fulfill consumer demands for more variety and specific tastes

Modify production faster

Maintain profitability while producing smaller batches

#### Keys to success

Pursue digitalization and Industry 4.0 concepts

Implement fully digitalized production lines using Opcenter

Transition to digital control and line configuration

#### Results

Increased traceability Handled orders more efficiently Monitored and controlled production in real time

#### Opcenter helps The Absolut Company implement fully automated production lines

#### A world-leading spirits brand

For a connoisseur, the choice of vodka is not something to be taken lightly. It should be world-class, which characterizes the spirits of The Absolut Company, a subsidiary of Pernod-Ricard. With production in the small Swedish village of Åhus, the attitude within the The Absolut Company operations is both proactive and uncompromising. Quality, efficiency and climate awareness are characteristic features, from raw material to production and distribution. Absolut Vodka is made from winter wheat harvested in the southern parts of Sweden with water from its own deep wells. The production method, based on founder L.O. Smith's from 1879, is a continuous distillation process, with several stages to remove unwanted compounds and impurities. This process must take place in a meticulously controlled, automated and energy-efficient production loop.

The Absolut Company is the Swedish food industry's flagship and the world's sixth-largest spirits brand with a presence in approximately 150 markets globally – a position that places high demands on all stages of



siemens.com/opcenter

"We are now building a platform to be able to meet future requirements for flexibility and agility in production."

Emil Svärdh Senior Automation Engineer The Absolut Company





production, from start to finish. "We have a production philosophy that reflects these high ambitions: 'One source, one community, one superb vodka," says Emil Svärdh, senior automation engineer, The Absolut Company. "This slogan says a lot about our quest to always deliver world-class manufacturing, and the Industry 4.0 concept will be a crucial factor in living up to current and future production, consumer and environmental requirements." This quest involves collaboration with partners who share the company's approach, including Siemens, whose software and hardware play key roles in production.

## Manufacturing operations management transforms production

Opcenter<sup>™</sup> software for manufacturing operations management (MOM) is critical to The Absolut Company's production processes. Opcenter is part of the Xcelerator<sup>™</sup> portfolio of integrated solutions and services from Siemens Digital Industries Software. With Opcenter as a base, The Absolut Company is creating a dynamic platform to transition to digital control and line configuration of the five production lines in the Åhus facilities.

"With fully automated production lines and increased regulatory requirements there will be a need for increased traceability of product data and integration with business systems."

Emil Svärdh Senior Automation Engineer The Absolut Company



"It is no longer only the physical value chain that must be managed and developed, but also the digital reflection of these flows. It is about integrating data and information points that are in completely different systems."

Emil Svärdh Senior Automation Engineer The Absolut Company

"The solution fits us perfectly, because it has been developed to cover the entire value chain, from receiving incoming materials to distribution of produced goods, including quality control, product planning and scheduling as well as reporting, trends and advanced analysis," Svärdh says.

The Absolut Company has implemented Opcenter Execution Process software in a project in one of its factories in Åhus, a first step in the rollout to the three factories that produce premium beverages for global distribution. At present, the company has a fully digitalized production line and is working on its remaining four production lines to go live in 2021.

#### Digitalization as competitive advantage

The Absolut Company understands that digitalization is the key to continuing to be at the forefront of a changing industry. Developing into a fully digitalized, cuttingedge company is one of the pillars of the business. "With fully automated production lines and increased regulatory requirements there will be a need for increased traceability of product data and integration with business systems," Svärdh says.

"The Industry 4.0 concept is part of our production strategy," Svärdh explains. "Like other digital investments, Industry 4.0 is important for keeping pace with developments in the market and the digital disruption that is taking place. We are convinced that we will find new types of value creation within the framework of both Industry 4.0 and digitalization in general. But not only for the business community, but also for our customers and consumers. It will require competence development, existing and new partnerships, collaborations, testbeds and investments. However, I think it will go fast, and we must be prepared."

The Åhus site produces vodka in all its forms, including vodka for mixing into ready-made drinks and limited editions. In total, 125 million bottles are produced per year. The water comes from The Absolut Company's wells, with a particularly suitable calcareous water, located under Kristianstad plains. The distillation process is a continuous process controlled by temperature and pressure to remove unwanted compounds. The original recipe specified eight stages. "Today this has developed and within the same batch we can actually run the continuous process over a hundred times before total purity has been achieved," said Svärdh. "In addition we are extremely energy efficient – 98 percent better than the industry average – which is equivalent to 98 percent less climate impact per liter of distilled alcohol."

#### **Environmental sustainability**

The Absolut Company uses 125 million glass bottles annually, but the company buys bottles from a supplier that uses 49 percent recycled glass. Currently, production uses more than 85 percent renewable energy, and the company's goal is to be 100 percent  $CO_2$ -neutral in the entire value chain by 2030. The Absolut Company is influencing companies in its value chain to develop cleaner, electrically based means of transportation, and transports the majority of its production by boat for global distribution, which is the most energy-efficient mode per liter.

#### Fully automated production

The Absolut Company strives for fully automated production. "We can say that the first time a person's hand touches a bottle is when it is placed on the shelf for sale, the second time when the customer takes it," says Svärdh. "This is a logical consequence of a fully automated production, from defoiling incoming glass to the filled and labeled bottles going out on a pallet, transported directly to a high-bay warehouse in the port for later shipping into the world."

The site in Åhus has five fully automatic production lines and a flexible line for smaller special series. "A majority of the control systems come from Siemens and we also use Siemens' supervisory control and data acquisition system SIMATIC WinCC as our visualization software," Svärdh explains. "We generally build the production lines by connecting components and machines from several different suppliers."

A growing challenge for The Absolut Company is producing smaller and more substantively varied batches. "We need higher efficiency," Svärdh explains. "We have a high utilization rate and an overall equipment efficiency between 70 and 75 percent. We strive to maintain this level, even though the batches are getting smaller in the wake of an increasingly richer number of flavors and bottles. We are focusing a lot on this area together with Siemens and we are building the platform to meet our future demands."

"The solution fits us perfectly because it has been developed to cover the entire value chain, from receiving incoming materials to distribution of produced goods, including quality control, product planning and scheduling as well as reporting, trends and advanced analysis."

Emil Svärdh Senior Automation Engineer The Absolut Company

#### Solutions/Services

Opcenter Execution Process siemens.com/opcenterexecution-process

#### **Customer's primary business**

The Absolut Company is a leading distiller of wine and spirits best known for its iconic Absolut vodka brand, the world's leading premium vodka brand and the fourth-largest premium spirits brand worldwide. Key markets include North America, Mexico, Germany, the U.K., and the travel retail market. Other Absolut Company brands include Malibu coconutflavored rum, Kahula coffeeflavored liqueur, and Wyborowa, Luksusowa, and Frïs. www.theabsolutcompany.com

#### **Customer location**

Åhus Sweden

## Opcenter and enterprise resource planning

Opecenter is integrated with the company enterprise resource planning (ERP) system. Both systems create an integrated work order that includes different information coming from several business systems and merged with other line-specific data. This work order is the basis for the production line setup and selection of operations that should be executed for the products to be manufactured.

"We build a dynamic digital path for each work order," Svärdh says. "If we want to change, add or delete any operation, we can now do it digitally. It increases our agility and allows us to meet the changes that will come."

"With digital development, the concepts of material movements and value chains take on a new meaning," says Svärdh. "It is no longer only the physical value chain that must be managed and developed, but also the digital reflection of these flows. It is about integrating data and information points that are in completely different systems. This is where the Opcenter Execution Process platform comes in. Doing this will uncover new exciting opportunities, like having data to help us in our continuous



improvement or improving traceability through blockchain technology. I'm confident that digitalization will bring new value both to manufacturing and to our consumers."

#### Leveraging the digital twin of production

"For every physical value chain there has to be an equivalent digital value chain," says Svärdh. "The digital twin is a requirement. We invest in creating an accurate digital replica of the production lines and the value chain to get a better basis for simulations of digitally configured batch runs. In this way, we can digitally test and validate that a run works as intended. If something needs to be changed, we can do it digitally before we start the physical equivalent. In fact, it will be faster, qualitatively better and, above all, cheaper."

**Siemens Digital Industries Software** 

Americas+1 314 264 8499Europe+44 (0) 1276 413200Asia-Pacific+852 2230 3333

© 2021 Siemens. A list of relevant Siemens trademarks can be found <u>here</u>. Other trademarks belong to their respective owners. 83516-C2 3/21 A

#### siemens.com/software



**Consumer products** 

# **Chocolates Valor**

Siemens solution helps Chocolates Valor build a streamlined factory for top-quality products

#### Product

Manufacturing Operations Management

#### **Business challenges**

Capture shop floor data in real time

Improve transparency and communication among departments

Make decisions in a more flexible, accurate and efficient way

Improve visibility across the whole supply chain

Optimize manufacturing processes

#### Keys to success

**Implement Preactor APS** 

Integrate Preactor APS with ERP and existing automation systems

#### Results

Faster sequencing of production orders

More accurate production planning

Improvement of production master plans update

Enhanced communications among departments



Preactor APS drives the digitalization of industrial processes at Chocolates Valor by streamlining production planning

# A leader in chocolates for more than a century

Founded in 1881, Chocolates Valor S.A. produces high-quality chocolate bars, chocolates and snacks. It is a leader in the domestic market for sugar-free chocolate bars, bars with a high content of cocoa and soluble products. The company is renowned throughout Spain, but its products are distributed in more than 60 countries. Besides using only top-quality raw ingredients, the company has started the process called "From Bean to Bar," selecting the raw materials at their sources and processing them at its plants in Spain from the very start: roasting and grinding, blending and mixing, refining and finally molding, to assure the traceability of cocoa from its origin until it is transformed into a bar, without using pre-processed cocoa paste.

Chocolates Valor operates two modern production sites which together occupy more than 65,000 square feet and produce almost 21,000 tons of chocolate yearly. The company also has its own network of chocolate shops, with more than 33 points of sale throughout Spain. The core competitive advantage of Chocolates Valor is its drive to keep alive its longstanding chocolate tradition with high-quality products, accompanied by a manufacturing strategy focused on achieving excellence.

# Digitalizing the supply chain from cocoa beans to chocolate bars

For Chocolates Valor, digitalizing the company is essential, as it means obtaining

siemens.com/mom

#### **Results** (continued)

Saved 16 hours of planner resources each week

Increase contribution to service level from 97.8 to 98.5 percent



readily available and more accurate information, which simplifies decision making and prioritizing actions. "A high degree of standardization is required in all processes," says Jordi Barbero, supply chain manager at Chocolates Valor. "Starting from that and with the appropriate training for our staff, very good results can be achieved in an acceptable period of time."

At Chocolates Valor, the production process is key, since it manufactures all the products it sells, carrying out the complete transformation process from cocoa beans into chocolate, to its final packaged form. This requires total, real-time control of all information coming from the shop floor, as well as appropriate tools allowing for more flexible decision-making processes and fostering the optimization of manufacturing processes.

# Visibility and transparency of plant information

Before implementing Preactor APS software, Chocolates Valor used Microsoft Excel spreadsheets based on data captured from its SAP® enterprise resource planning (ERP) solution. This system requires a great effort to capture data from the plant, and was time-consuming and required many resources. Nonetheless, information retrieved was inaccurate and did not enable a flexible and efficient decisionmaking process. It also offered little visibility on relations among production processes, thus making the whole supply chain less transparent.

"With Preactor APS we have gained 16 hours per week for the planner resource dedicated to sequencing production."

Jordi Barbero Supply Chain Manager Chocolates Valor





# Synchronized and streamlined manufacturing processes

The production process is key for Chocolates Valor. "Our chocolate manufacturing process maximizes the quality of the final product," says Barbero. The company thus decided to invest in digitalization solutions for the production environment, in particular through Preactor APS, which is a family of products for production planning and programming that improves the synchronization of manufacturing processes and offers greater visibility and control. "We decided on the Preactor APS solution because we needed to be more flexible and accurate when it came to production," Barbero says.

The choice to adopt Preactor APS was also based on the ability to integrate with Siemens Digital Industries Software automation systems already used in Chocolates Valor plants, as well as the solid reputation of Siemens at a global level. The adoption of the tools required two additional weeks with respect to the implementation plan, for training and user readiness.

#### Immediate return on investment

The implementation of Preactor APS delivered significant functional advantages. The solution enabled Chocolates Valor to sequence production orders faster and to more accurate production planning. It also streamlined updating of production master plans and enhanced interdepartmental communications.

In terms of time, these improvements have delivered measurable results. "With Preactor APS we have gained 16 hours per week for the planner resource dedicated to sequencing production," Barbero says. "And we have contributed to increasing the service level. Two years ago, it stood at 97.8 percent and now we are at 98.5 percent."

## Future plans: continuing on the path towards excellence

Chocolates Valor plans to continue with the digitalization of its factories and included this objective in its strategic plan. The main goal is to achieve the ability to display data in real time across the whole supply chain to improve flexibility throughout the organization. The company is



# "Our chocolate manufacturing process maximizes the quality of the final product."

Jordi Barbero Supply Chain Manager Chocolates Valor



#### Solutions/Services

Preactor APS siemens.com/mom

#### Customer's primary business

Chocolates Valor S.A. is a company that makes highquality chocolate bars and snacks and specializes in chocolate pralines. It is a leader in the domestic market for sugar-free bars, chocolate bars with a high cocoa content and soluble products. www.valor.es

#### **Customer location**

Villajoyosa, Alicante Spain

"We decided on the Preactor APS solution because we needed to be more flexible and accurate when it came to production."

Jordi Barbero Supply Chain Manager Chocolates Valor



aware that having efficient processes is not enough: they also need to be a flexible organization, and digitalization plays an essential role for achieving that flexibility.



"...we have contributed to increasing the service level. Two years ago, it stood at 97.8 percent and now we are at 98.5 percent."

Jordi Barbero Supply Chain Manager Chocolates Valor

**Siemens Digital Industries Software** 

Americas+1 314 264 8499Europe+44 (0) 1276 413200Asia-Pacific+852 2230 3333

© 2019 Siemens. A list of relevant Siemens trademarks can be found <u>here</u>. Other trademarks belong to their respective owners. 76067-C10 1/19 H

#### siemens.com/software



### About Private Label Manufacturers Association (PLMA) Australia & New Zealand

PLMA Australia & New Zealand is a not-for-profit division of the world's largest association of Private Label manufacturers. Headquartered in New York, the association comprises over 3,500 members globally. Our Mission is to foster the growth of Private Label products through the promotion of industry best practice, quality enhancement and a strong focus on delivery of innovation. Our aim is to build mutually profitable partnerships between our members and retailers by facilitating the sharing of latest trends and developments and by addressing in a constructive manner the major issues, opportunities and challenges facing both parties, in order to optimise outcomes.

#### www.plma.com.au

### About Siemens Digital Industries Software

Formerly Siemens PLM Software, our new name reflects the depth of our software offerings across a broad spectrum of industry domains. Amid unprecedented change and the rapid pace of innovation, digitalization is no longer tomorrow's idea. We take what the future promises tomorrow and make it real for our customers today. By blurring the boundaries between industry domains – across both physical and digital worlds – we bring the technologies of tomorrow to our customers today. Welcome to... Where today meets tomorrow.

#### plm.automation.siemens.com