A Digital Value Chain Strategy for the Dairy Industry

Take a Deep Dive into the Digitalized, Resilient Dairy Value Chain of the Future

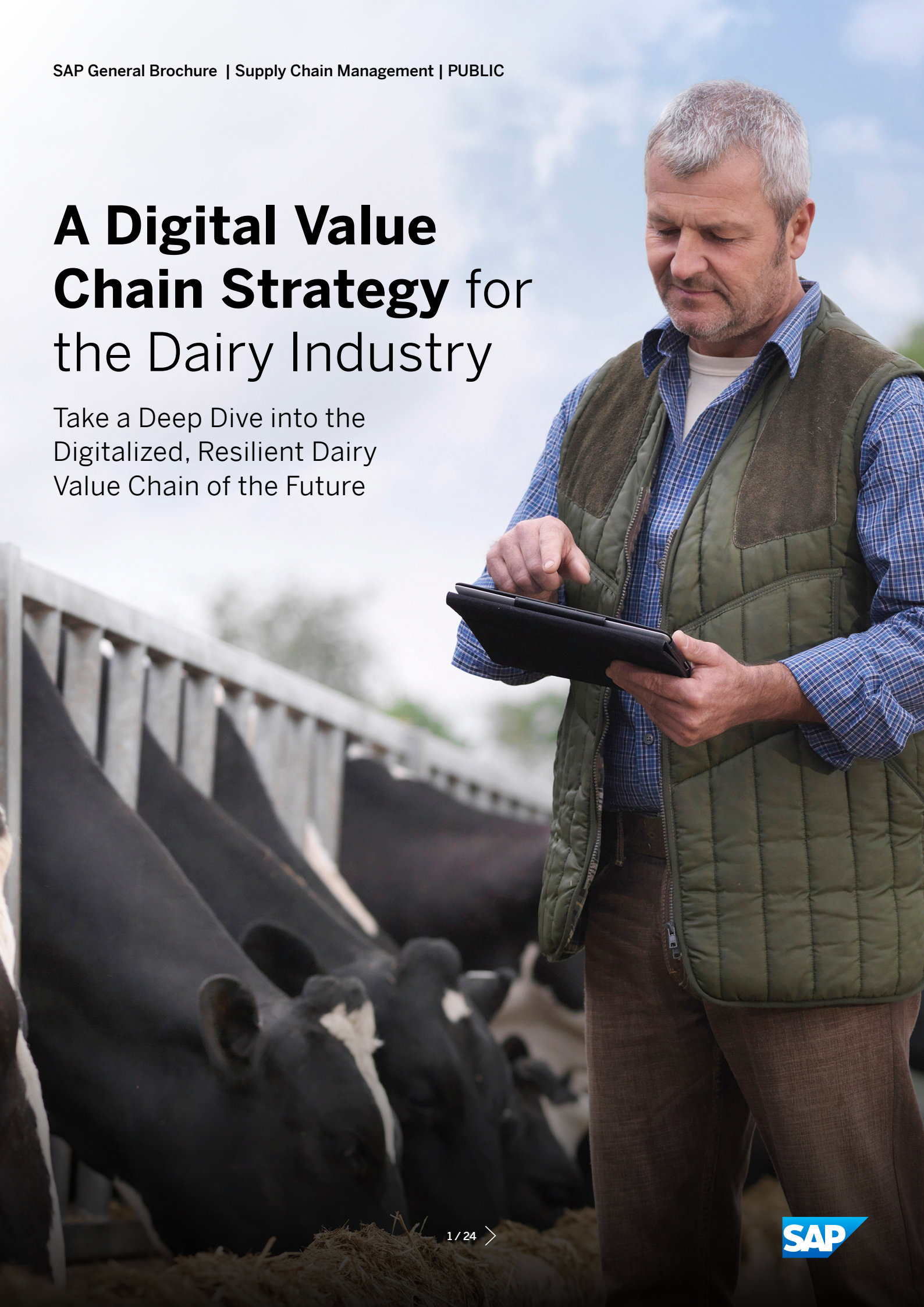


Table of Contents

Emerging Trends in the Dairy Market

Any characterization of the modern dairy industry as "old-fashioned" and locked into outdated modes of production are far off the mark. The reality is that **change and innovation** are at the heart of a dairy industry that is highly dynamic, increasingly global, and more technologically advanced than ever before. On the road ahead, opportunity awaits. But is your organization up to the challenge?

CHANGING CONSUMER BEHAVIOR

Let's start with the dairy consumer for whom – as has happened in many other industries – the impact of the COVID-19 pandemic has changed so much. Where and how consumers shop for and consume dairy products has shifted – forcing dairy companies to accelerate the adoption of technology to keep pace.

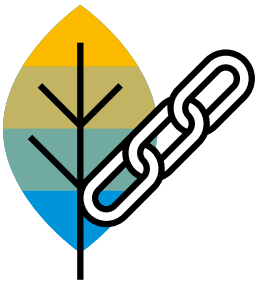
Increasingly, consumers want to buy online, whether it's direct from the producer, through a distributor, or from a local grocery store that offers pickup or home delivery services. At the same time, these consumers have an increased expectation of receiving full details regarding what the product contains, where it comes from, and how it's made.

PLANT-BASED INNOVATION
Mainstream appeal for plant-based foods is not limited to "meatless meats." Today, the growing appeal of such foods is driving the dairy sector to expand into more market categories and regions. This is a global trend with regional differences, and dairy companies everywhere are rushing to capitalize.

NEW OMNICHANNEL EATING
The pandemic accelerated dairy consumers' ongoing shift toward online shopping. At the same time, restaurant deliveries have continued to grow, and consumers can now directly access many specialty products that were previously accessible only through B2B food service channels. In addition, high-quality barista-style milks are emerging that allow consumers to recreate a "Starbucks" experience in the privacy of their own homes.

PRIORITIZING HEALTH
The pandemic experience has increased consumer awareness of the importance of immune health. Today, consumer pressure and expectations are driving dairy companies to prioritize health and wellness. One major focus is on products that are both organic and packed with high-quality protein. Dairy producers that create and market products that meet these expectations are discovering a new way to differentiate their offerings in a crowded marketplace.

ENVIRONMENTAL SUSTAINABILITY
Another area of innovation for the dairy industry is environmental sustainability. The news is good in this area, with consumers increasingly willing to pay more for food and beverages that are both healthy for themselves and the environment. Dairy producers see the opportunities. At the same time, public policy is sometimes creating sustainability incentives. Take, for instance, the recent decision by New Zealand's government to levy a per-cow tax to reduce carbon emissions. It seems that cow efficiency will continue to be a focal point for getting dairy producers to reach the goal of net zero emissions by 2050.



The growing appeal of plant-based foods is driving the dairy sector to expand into more market categories and regions.

Challenges in the Dairy Industry Value Chain

Traditional challenges of monitoring demand and responding in a way that will maintain a steady flow of supply remain top-of-mind concerns for dairy producers. Today, however, these challenges are exacerbated by unpredictable disruptions and growing industry complexity. Here we take a look at these challenges in the contexts of demand management, supply chain management, disruption and risk management, and logistics execution.

DEMAND MANAGEMENT

Demand for dairy products is growing worldwide, and dairy producers are struggling to keep pace. Yet, while demand grows, merely ramping up production is hardly sufficient. Today's dairy producers face the added challenge of an almost microsegmented market that has many overlaps. In the wake of the pandemic, for example, the retail segment is overlapping with the foodservice segment, with retail consumers increasingly expecting to get foodservice-type deliveries to their homes – only in smaller quantities and at a price point they can afford. This requires dairy producers to detect demand signals for a far more diverse set of buyers and adjust business models and pricing to maintain profitability.

This new landscape, unfortunately, remains vulnerable to a range of disruptive forces, such as climate-related events, pandemics, political upheavals, trade wars, labor shortages, and inflation. It doesn't help that growing complexity has rendered traditional modes of forecasting obsolete. Generating accurate forecasts from a simple set of reliable data points is no longer feasible. Today, accuracy depends on access to a wide array of data sources from diverse sectors and geographies as well as the ability to quickly analyze data trends. This requires dairy producers to up their game when it comes to collaboration and data management.

Speed is important too. Quarterly forecasts no longer suffice. Increasingly, dairy producers seek to consume and respond to demand signals in as close to real time as possible. This, in turn, requires higher levels of responsiveness and operational agility to honor commitments and keep customers satisfied.

SUPPLY CHAIN MANAGEMENT

When it comes to supply management, a key issue in the dairy industry is processing capacity. This needs to be continuously balanced based on fluctuating demand, availability of raw materials, and capacity bottlenecks that may emerge at any time.

After production, both fluid milk and powdered milk are stored in tanks or silos. This storage represents a significant capital investment that needs to be planned and managed to maximize ROI. Dairy companies also need to time product storage and coordinate with transport logistics to prevent spoiling and meet customer demand. Preventing spoiling after products leave the tank is even more of a challenge, with significant rates of waste involved. And even if products make it to the shelf on time, customers tend to avoid buying products that expire within five days.

Consider the traditional production and transit scenario as depicted in Figure 1 below. Typically, dairy products remain in the plant for at least three days until they are fully released. Add another five days for transit to a distribution center, after which the product still needs to make its way to the store shelf. Far too often, the expiration date has lapsed by the time the product is ready for sale, and the end customer declines to purchase.

To maximize profitability, many dairy producers seek to accelerate this process by shipping immediately after production and initial inspection. Meanwhile, the plant lab finishes quality control testing for the entire lot and releases the product within three days, making the product available at the distribution center within five days instead of eight days. The result is lower inventory carrying costs with fewer physical-storage requirements at the plant. Ultimately, the final product is closer to the customer, who can buy it before expiration. But it should be noted that success with such an accelerated process requires sophisticated data tracking and coordination across supply chain partners. The incentives for accomplishing this are clear.

Dairy producers also need to balance and optimize the use of raw materials and components. To do so, it's important to remember the mutual independence of supply and demand for raw materials. Demand is driven by the consumer, and this has no bearing on availability of the supply. The task for dairy producers is to effectively balance the two sides of the equation to avoid shortages and keep customers happy.

Figure 1: Traditional Production and Transit Timeline

Key to this task is maintaining transparency in the supply chain through constant collaboration and communication. Supply chain managers seek visibility into inventory, insight into the overall supply situation upstream, and awareness of any demand variations that may impact the ability to execute. Real-time collaboration with suppliers and a thorough understanding of demand streams (from sales, marketing, and promotions) is critical.

DISRUPTION AND RISK MANAGEMENT

To the traditional supply chain domains of demand and supply management, dairy producers now need to add the skill of disruption management. While the COVID-19 pandemic has proven the need for supply chain resilience, it's obvious that disruption can come in almost any form, as earlier indicated.

Accordingly, dairy supply chains need to shift from an orientation of low-cost production to one of risk resilience and sustainability. To achieve this shift, organizations need to connect end-to-end supply chain processes to internal operations and external partners and put all associated data into a context that makes business sense.

Real-time visibility into this data is key. This is what enables your organization to shift from after-the-fact reactions to accurate predictions that give you the lead time required to deliver as promised. It's also important to explore new business models that better fit changing circumstances, such as selling direct or diversifying your product mix to meet the needs of emerging markets. This, in turn, puts a premium on organizational agility – the ability to flexibly shift operations and internal business processes toward whatever the need of the moment may be.

LOGISTICS EXECUTION

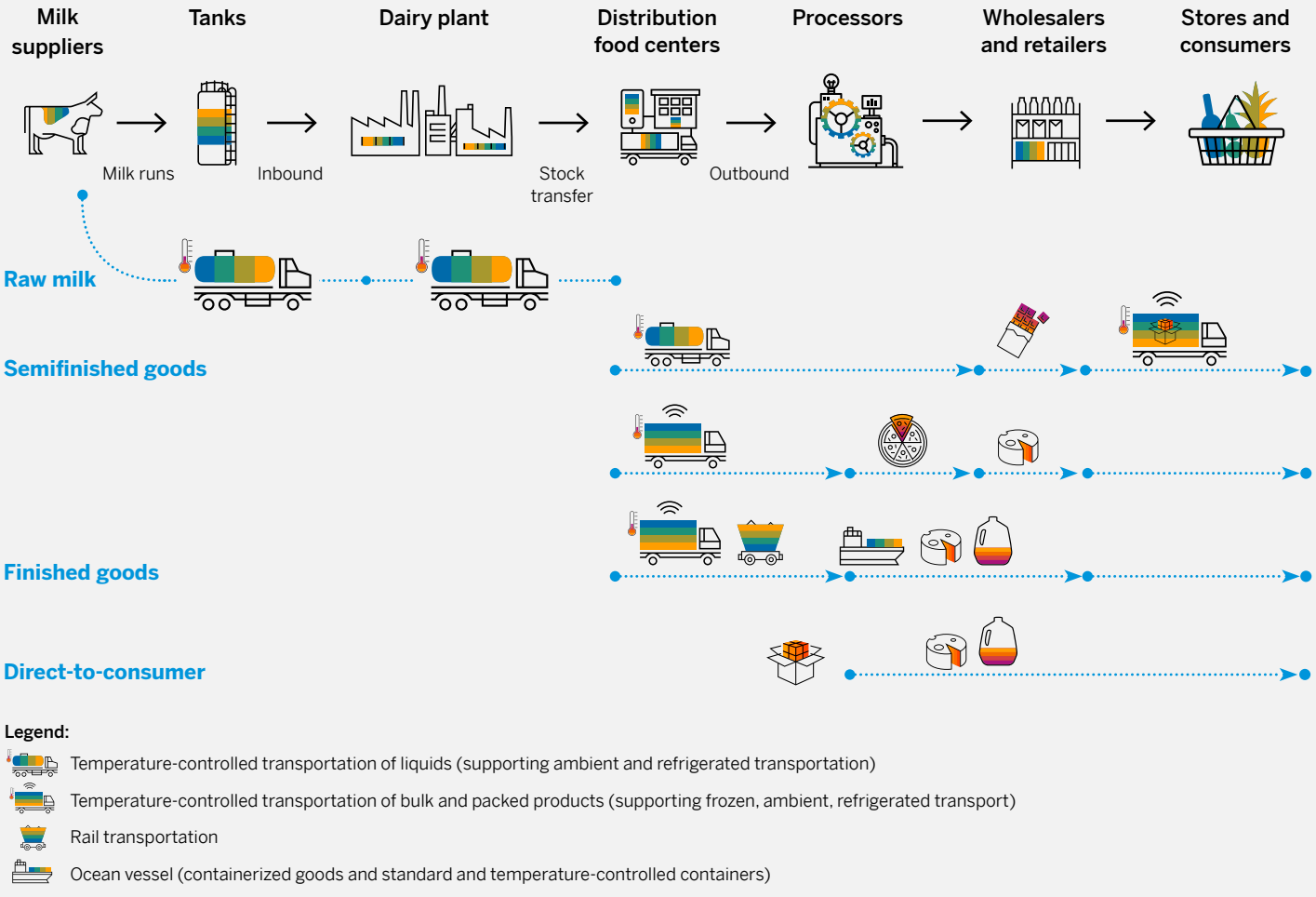
Demand for greater transportation capacity is on the rise for dairy producers – propelled, in part, by growing production and an increased drive to maximize profits with immediate shipping. Of course, the dairy industry is hardly alone. Other industries are doing whatever they can to secure transport resources as well. This is leading to bottlenecks. And at the same time, increased demand for transport, particularly by road, increases emissions – impeding efforts to achieve sustainability goals.

What's needed is efficient transportation planning. Dairy producers aim to identify consolidation opportunities, maximize resource utilization, and optimize routing. The goal is to reduce total distance driven, thus speeding deliveries while at the same time reducing emissions. This is true across multiple transport scenarios, including:

- **Inbound milk collection processes** (or so-called milk runs), which involve scheduling regular milk pickups from farms at various intervals in order to ensure a steady flow of supply. To control spoilage, temperature-controlled trucks are required.
- **Outbound transportation** of dairy products to food processors, wholesalers, retailers, stores, and consumers. Here consideration needs to be given to different product types (liquid as opposed to packed, for example) and the corresponding delivery vehicles required for transport. Open hours for targeted delivery destinations must also be considered during planning and scheduling.
- **International outbound transportation**, which involves loading and shipping goods in containers. Key challenges here include ongoing container shortages, fluctuating container prices, and the risk presented by delays due to port congestion, shutdowns, or events such as the Suez Canal blockage.

While these scenarios put the emphasis on planning, dairy producers also need the flexibility to execute in the moment. What's needed here is faster streamlined communication across a growing number of logistics providers, with real-time insight into in-transit shipments and notifications that alert teams of disruptions (see Figure 2).

Figure 2: Logistics Execution in the Dairy Industry



Achieving a Risk-Resilient and Sustainable End-to-End Value Chain

Across industries, highly digitalized organizations have the ability to navigate disruptions more successfully than their peers. The dairy industry is no exception. In an age of uncertainty, dairy producers need digitalized operations and supply chains that are built for speed and flexibility.

But let's be honest, what digitalization means to one company can be very different to what it means to another, with major differences in the extent to which companies embrace this challenge. Where your organization stands on the digitalization maturity curve can mean the difference between success and failure.

THE FOUR STAGES OF DIGITAL MATURITY IN THE DAIRY INDUSTRY

Connectivity

No dairy producer is an island – which is why digitally mature organizations are increasingly networked. Connected dairy producers are replacing disconnected, one-to-one trading-partner integrations with networks that bring points of integration into a single place. The result is a network effect that fosters, and even enforces, cooperation across functional silos – breaking down organizational walls and driving more-informed decision-making. Primary benefits include reduced financial and operational risk through early detection of issues and greater customer satisfaction through the proactive resolution of issues.

Productivity

Recognizing that greater connectedness helps drive productivity, leading dairy producers are taking connectedness to the next level by taking a cue from the Industry 4.Now strategy. This initiative envisions flexible real-time collaboration focused not only on the production process but also on all of the activities and organizational units that feed into production. It strives toward visibility across all silos and the automation of production processes wherever possible.

Operational Agility

Connectedness and improved productivity help dairy producers improve operational agility by breaking down business silos with a digitally connected supply chain. Connections are maintained not only across departments in the organization but also across the ecosystem of customers, suppliers, contract manufacturers, logistics service providers, and other partners that make up the dairy industry value chain. Agility is made possible by digital technology that supports fast collaboration, efficient data sharing, and predictive insight – enabling you to see what's coming and respond quickly. Whether it's a climate event that creates a supply chain bottleneck or a new opportunity to seize market share with a new product, the operational agility to respond effectively is quickly becoming a point of differentiation in the dairy industry.

Sustainability

The fourth stage of digital maturity in the dairy industry builds on the connectedness, productivity, and agility that enable a resilient supply chain to run sustainable business practices. With full visibility into data to show compliance with regulations and sustainability policies, dairy producers can implement processes that maximize reuse, minimize waste, reduce the carbon footprint, and protect the health and safety of employees.

MODERNIZING THE DAIRY SUPPLY CHAIN

For decades, dairy companies have focused on "moments of truth" – the instant a consumer buys a product in the store and the moment they use the product at home. The focus on these moments assumes a linear path to purchase, with a set of defined touch points aimed at further influencing a transaction or purchase.

Today, the focus has shifted to "moments of opportunity" – wherever they may present themselves. To create such opportunities, dairy producers seek omnichannel marketing capabilities to reach and interact with customers in a seamless fashion across all channels, devices, and platforms.

If a customer buys a product online, you should be able to identify and serve that same customer at another time on the phone, on social media, or in the store. You should also be able to understand customer preferences across channels. Does a particular customer like 2% milk or whole milk? What flavors of yogurt do customers prefer? How do they want their products delivered? Armed with this insight, you can better capitalize on moments of opportunity while delivering the kind of engaging, relevant, and highly personalized experiences that customers increasingly expect.

Meeting these consumer expectations requires new sets of competencies that go beyond traditional strengths. You must be able to:

- Execute with speed and agility
- Fulfill demand seamlessly and efficiently
- Deliver the end-to-end transparency that creates enduring consumer trust
- Support your efforts with the right people in the right roles, enabled by the right tools

For industry leaders in this new world, strategic priorities focus on enabling new business models that increase agility and make it possible to maintain profitable growth in existing channels. Dairy companies at this level seek to deliver personalized outcomes, helping consumers live fuller lives based on a deep understanding of their wants, needs, attitudes, and behaviors. Increasingly, dairy companies also seek to compete as an ecosystem, using the assets in their networks to develop and deliver distinctive products and services.

In the face of this change, the dairy industry must redefine its processes, its revenue models, and the way people work. By connecting processes digitally – from product innovation and procurement to manufacturing, supply chain, marketing, and sales and service – companies can embrace the experience economy and capitalize on new and emerging consumer opportunities.

Dairy companies need to time product storage and coordinate with transport logistics to prevent spoiling and meet customer demand.

The End-to-End Value Chain Framework in the Dairy Industry

DAIRY BUSINESS MODELS AND THE FULL VALUE CHAIN

Broadly speaking, companies in the dairy industry follow four main business models that span a spectrum. At one end of the spectrum are the dairy companies that maintain vertically integrated end-to-end operations. These organizations manage the full industry value chain from cow and farm management to final product. On the other end of the spectrum are the more narrowly focused farms focusing further downstream on the supply chain.

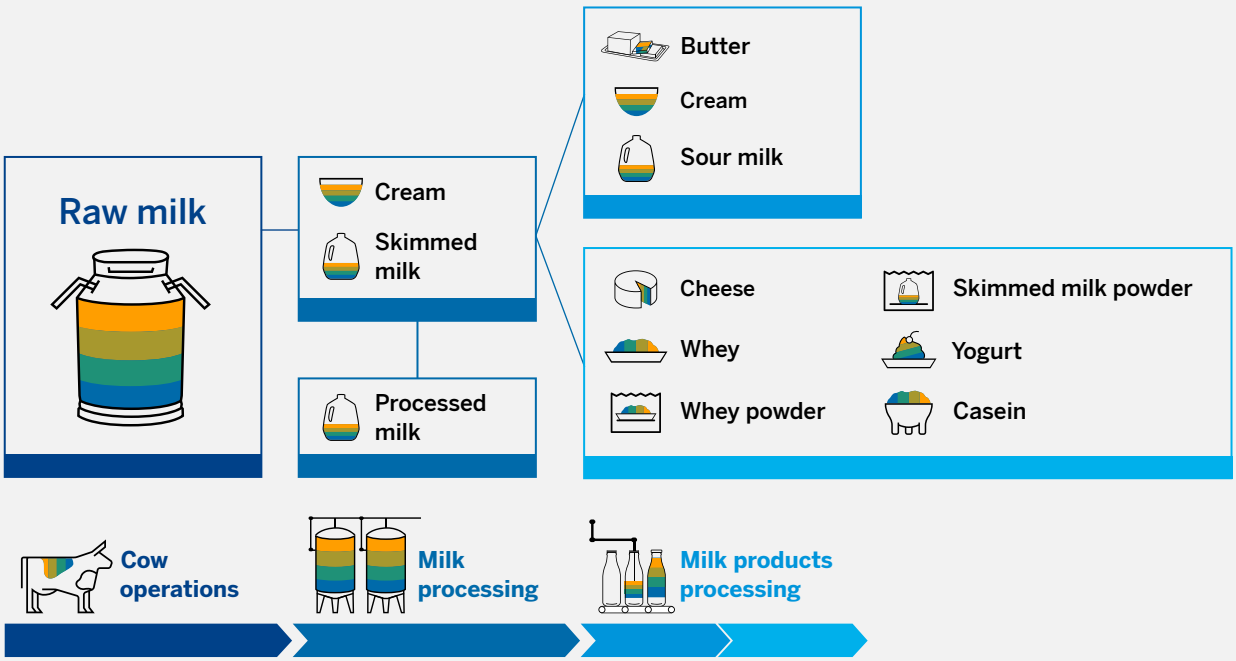
For the sake of simplicity, we categorize dairy industry business models by tiers – starting with the largest vertically integrated players and moving down the supply chain.

Tier I Operators: Full Supply Chain Operations

Figure 3 below represents the operational business model for large dairy producers that directly control the core of the dairy industry supply chain.

These dairy producers run their own cow operations and produce their own milk, but they may also purchase raw milk from other farmers to supplement inventory as needed. They own the fields the cows graze and the feed mills where the cows eat. Production lines produce milk, butter, yogurt, cheese, and more. Operations often span multiple plants, and dairy producers are increasingly either running their own retail operations (in store and online) or working closely with retailers to put their products on shelves.

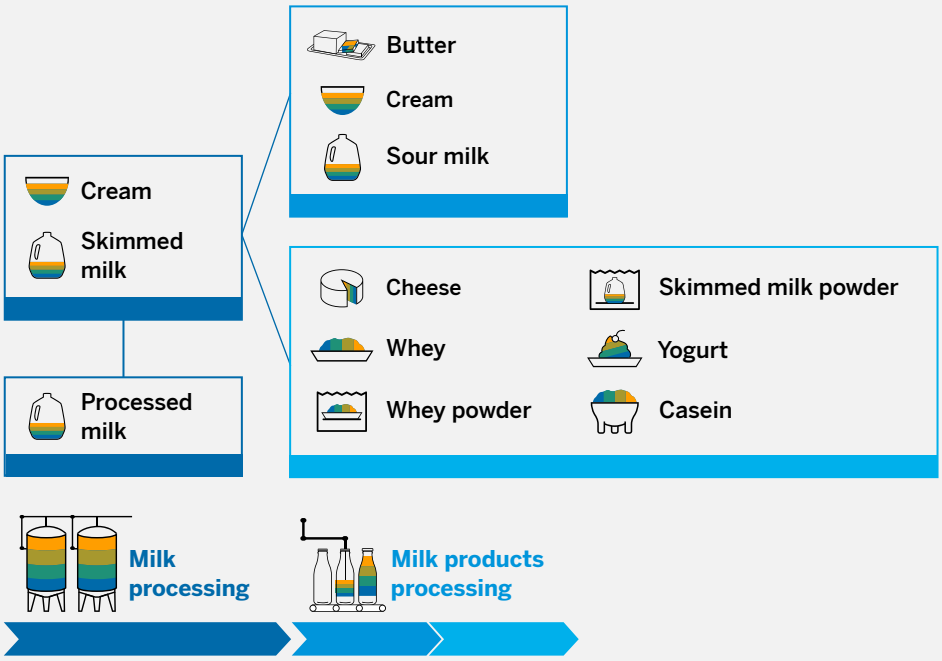
Figure 3: Tier I Operators: Full Supply Chain Operations in the Dairy Industry



Tier II Operators: No Cow Operations
These operators occupy a space further down the supply chain that starts with production (see Figure 4 below, which is a subset of Figure 3). Raw materials are imported from dairy farmers maintaining cow operations.

Yet, while these tier II operators outsource cow operations, they still need to coordinate supply at a time of increasing disruption. They also face the same challenges as "full supply chain" peers. They need to produce final products (butter, yogurt, cheese, and so on), often across multiple plants while managing retail operations and getting products on store shelves.

Figure 4: Tier II Operators: No Cow Operations, But Everything Else



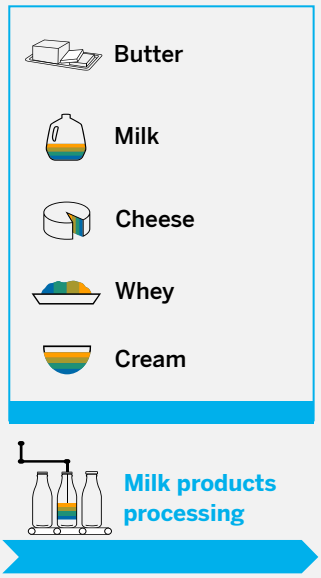
Dairy supply chains need to shift from an orientation of low-cost production to one of risk resilience and sustainability.

Tier III Operators: At Least Two Products
Tier III operators focus on producing at least two products in the value chain – such as producing cheese and whey, butter and cream, cheese and yogurt, or other combinations (see Figure 5). As is the case for the other producers considered thus far, they need to coordinate with retailers and get product in front of end consumers.

Tier IV Operators: Just One Product
Finally, tier IV operators specialize in a single product – butter, milk, cheese, and so on (see Figure 6). As with their tier III peers, these producers play a critical role in supplying the market with dairy products that are retail ready.

Figure 5: Tier III Operators: Combined Company, Making Milk and Other Milk-Based Finished Goods

Figure 6: Tier IV Operators: Specialized Company, Running Milk Product–Processing Operations

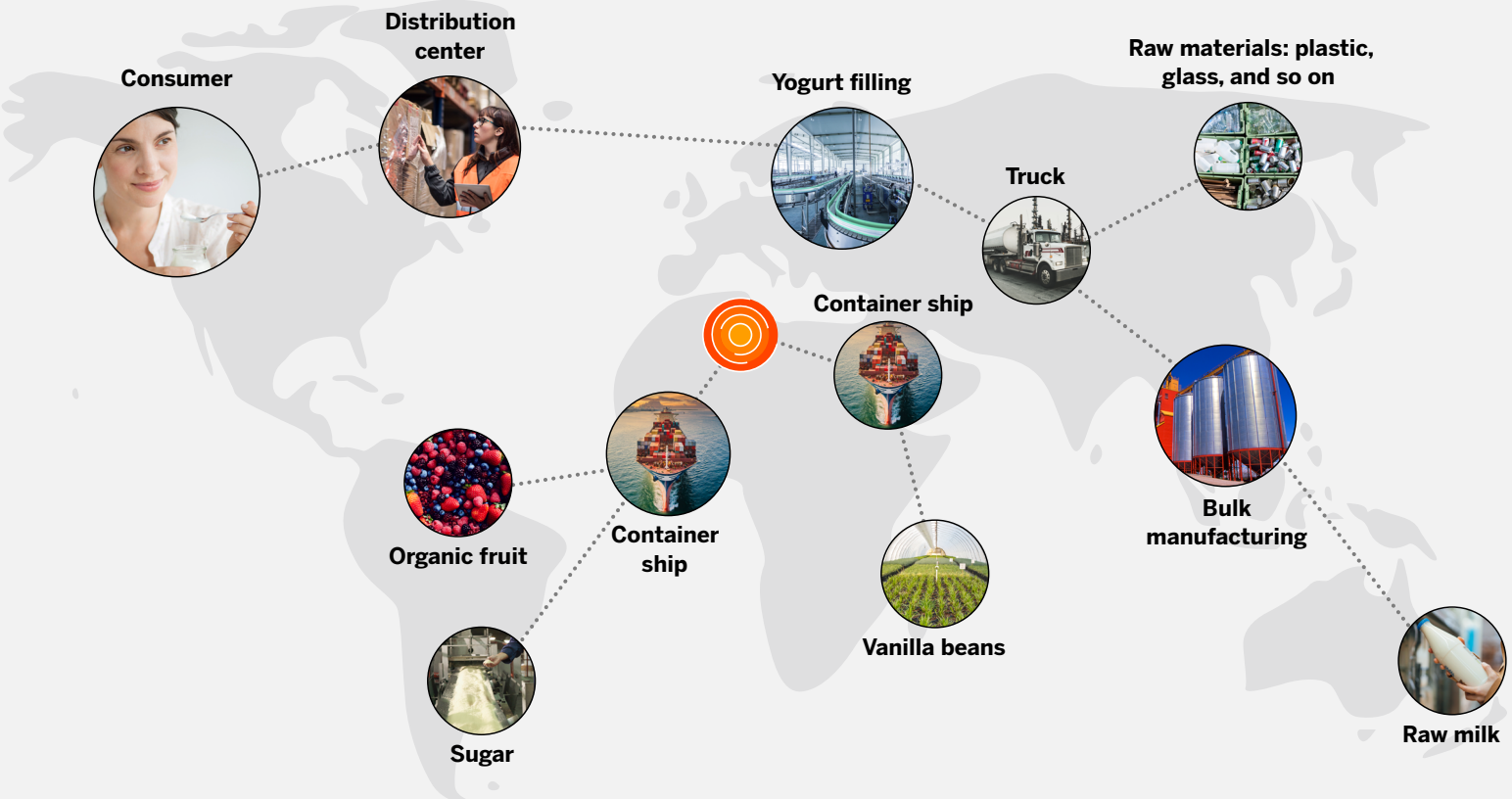


Digital Supply Chain Management in the Dairy Industry

Regardless of the business models pursued, leading producers in the dairy industry are eagerly embracing the digital reality of contemporary markets and recognize the need to move forward in the direction of becoming an intelligent enterprise. This is particularly important given the complexity of the industry's global supply chain (see Figure 7).

At SAP, we have long worked with dairy farmers to help digitalize their businesses. With hundreds of customers and years of experience, we've identified the following key areas of focus to consider when pursuing your own digital transformation.

Figure 7: Global Supply Chain Complexity in the Dairy Industry Using the Example of Vanilla-Raspberry Yogurt



VALUE CHAIN MANAGEMENT: INTEGRATE OPERATIONS ACROSS ALL STAGES, FROM DESIGN TO DELIVERY

The dairy industry is like every other industry in that it increasingly seeks to break down operational silos to facilitate collaboration, increase data visibility, and automate processes from end to end. Let's take a quick look at the importance of integrating the stages of the dairy industry value chain to help ensure success.

Design

More than ever, consumers expect a wide variety of new product options. To keep pace with this demand, design teams need to be connected to the rest of the supply chain. Customer experience data and other incoming market research needs to inform new product designs. Ideas about new flavors, healthy options, innovative packaging – whatever the innovation – need to be shared with planning, sourcing, production, and logistics teams to evaluate feasibility.

Design teams also want to design packaging that is sustainable. This requires connections to all teams to gather the data needed to demonstrate compliance. In an intelligent enterprise, no team is an island. Real-time data visibility and collaboration are must-haves.

Plan

Planning is the brain of any supply chain – and it's a process that never stops. A plan may be set, but it needs to be continuously revised, aligned, and synchronized across the value chain as production and delivery dates near.

In the dairy industry, this sort of synchronized planning is particularly challenging as your product portfolio grows – both in size and diversity. If you make yogurt, for instance, you must contend with a growing number of flavors, packaged in a variety of ways and sold through multiple channels. Planning in this context needs to be up to the complexity. To manage coordination up and down the supply chain, planners need ways to sense demand signals, simulate potential responses, and evaluate the impact on customers and the business. To speed the decision-making process, transparency and on-demand collaboration are critical. Manual processes involving spreadsheets and e-mail are not up to the task.

Source

When a design is set and a plan devised, dairy farmers need to source the raw materials. Even the organizations that run the full supply chain will need supplemental materials on occasion to meet consumer demand.

But finding a partner can be difficult. Long-term relationships are preferred, but with disruptions coming at you from every direction, you can't always depend on them. Leading dairy producers rely on digital connections to find, evaluate, and work with new partners. Onboarding should be quick; data sharing should be painless; and when the time comes to exchange invoices, processes should be automated.

Make
All activities seem to center on the "make" stage – getting the raw materials and packaging to the shop floor, making the production process as efficient as possible, and getting final products out the door. But the team making the product also needs to communicate with other departments to identify issues and avoid bottlenecks. Communication with planners on capacity is critical, and any change in demand may require an alteration in production schedules.

Again, spreadsheets and e-mail are insufficient, particularly when production is split across multiple plants. What's needed is real-time collaboration on demand, supported by centralized data views that put everyone on the same page.

Deliver
In the dairy industry, the delivery phase is particularly challenging. Critical for success is the ability to control temperature during transport to avoid spoilage and to deliver on time to optimize shelf life.

It doesn't help that distribution channels are proliferating. Dairy producers today find themselves delivering to traditional distribution centers, wholesalers, retailers, restaurants, and schools, as well as directly to consumers. To succeed, logistics teams need to have real-time insight into demand and instant coordination with other teams to help ensure transport capacity and deliver on time as promised.

DATA VISIBILITY: AUTO-GENERATE BILLS OF MATERIALS ACROSS ALL CATEGORIES OF GOODS AND MATERIALS

Data visibility is critical to managing smooth dairy supply chains that minimize waste and avoid disruptions. Data is required throughout the end-to-end process – from designing new products to getting them to consumers. Your organization should always be able to access and generate authoritative bills of materials that address not only your own inputs and commitments but also those of the other suppliers and partners beyond your organization. (See Figure 8 for an example of a dairy producer's bill of materials.)

This data is not only relevant for streamlining processes. It also plays a critical role in enabling processes that support the circular economy. Packaging, for example, can be designed to minimize waste, promote reuse, and reduce carbon footprint. In addition, data serves as a source of insight – giving you a historical view of past production runs, with all materials, partner, and cost data at your fingertips for interrogation as needed. Smart dairy producers know how to use this data to better understand what the market wants.

PLANNING: COORDINATE ACTIVITIES ACROSS BUSINESS STRATEGY, TACTICS, AND OPERATIONS

As mentioned earlier, planning is a job that never stops in the dairy industry – and planners need the tools, processes, and capabilities to build and execute plans over various time horizons (see Figure 9). To keep pace with demand and supply changes, planners need automated processes, analytics to make the right decisions faster, and simulation capabilities to validate decisions.

Figure 8: Example of a Dairy Producer's Bill of Materials

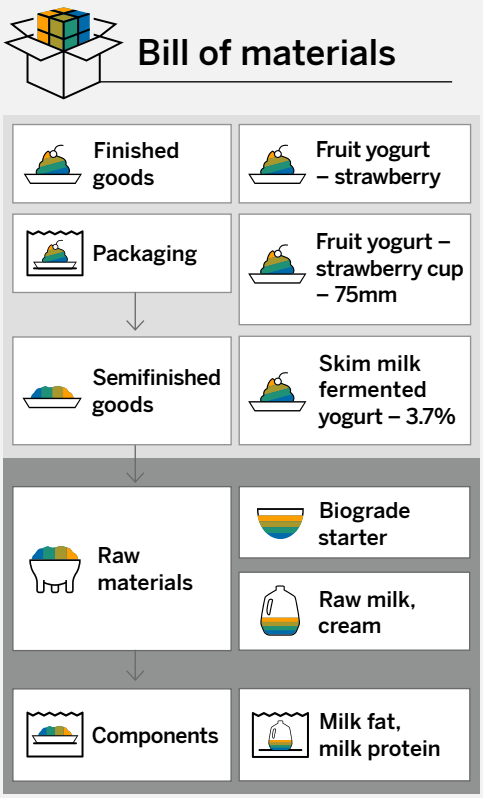
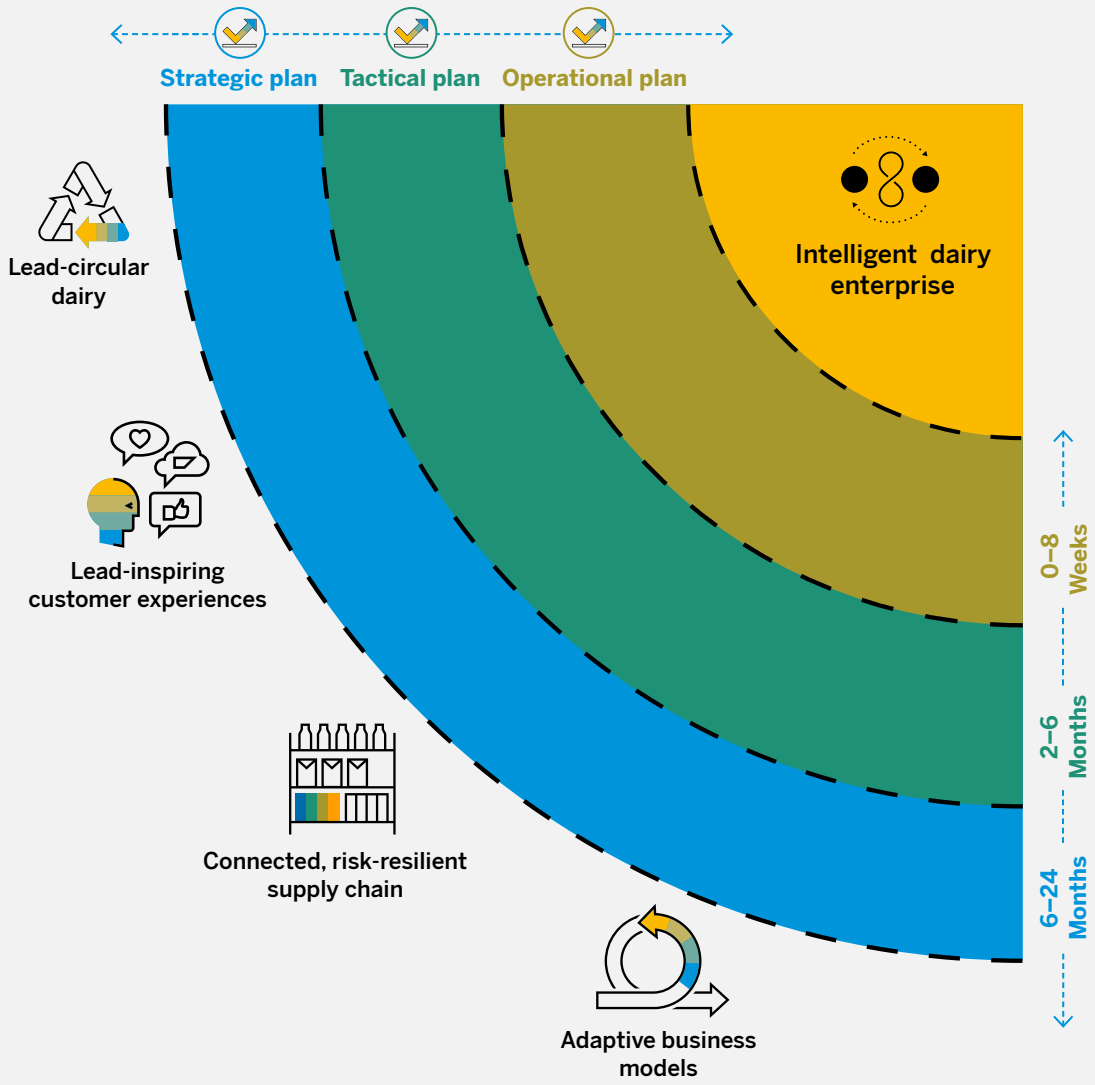
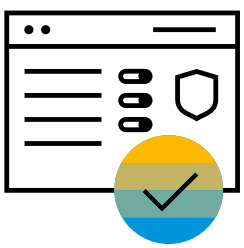


Figure 9: Risk-Resilient Supply Chain Planning in an Intelligent Dairy Enterprise





The dairy industry is like every other industry in that it increasingly seeks to break down operational silos to facilitate collaboration, increase data visibility, and automate processes from end to end.

Long Term: Strategic Planning
Long-term strategic planning in the dairy industry involves time-series planning based on seasonally adjusted parameters for various SKUs under management, typically using historical data. Dairy producers also need the visibility to stay on top of legal regulations that determine operational permissibility from country to country. Solutions, capabilities, and methodologies used to generate such plans include:

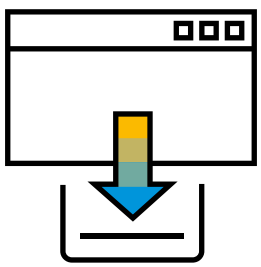
- Strategic sales and operations planning
- Raw materials forecasts and strategic contracts
- Capacity management (investment decisions)
- Transportation planning and strategic freight management (for negotiating freight rates with logistics providers)
- Planning and balancing for raw materials and milk components

Midterm: Tactical Planning
Midterm tactical planning happens as the supply and demand picture comes into sharper focus. Planning in this phase is order based – looking out over time horizons measured in weeks rather than months. Solutions, capabilities, and methodologies used to generate such plans include:

- Sales and operations planning
- Raw materials planning and supply contract
- Finished goods demand forecasting and supply planning
- Capacity management (adding labor, shifts, and so on) and prebooking ocean vessel capacity
- Raw materials and milk components planning and balancing
- Shelf-life and quarantine management

Short Term: Operational Execution
Effective short-term planning is crucial in the dairy industry. The time frames are right now – or at least daily – and the focus is on execution and filling orders as promised. All planning to date needs to be adjusted in the moment to deal with realities on the ground. Here, it is also important to monitor shelf life to ensure that expired products are not delivered and do not linger on store shelves. Solutions, capabilities, and methodologies used to generate such plans include:

- Finished goods demand sensing (short-term forecasting)
- Short-term replenishment/supply/materials requirements planning
- Raw materials and milk component planning and balancing
- Packaging, planning, and resource balancing
- Order consolidation (on pallets and transport resources)
- Transport order optimization (multidrop scheduling and routing)
- Shelf-life and quarantine management



Where your organization stands on the digitalization maturity curve can mean the difference between success and failure.

MODES OF OPTIMIZATION IN THE DAIRY INDUSTRY

Depending on your business objectives and the markets you serve, you may want to optimize in a particular direction to best meet your unique needs.

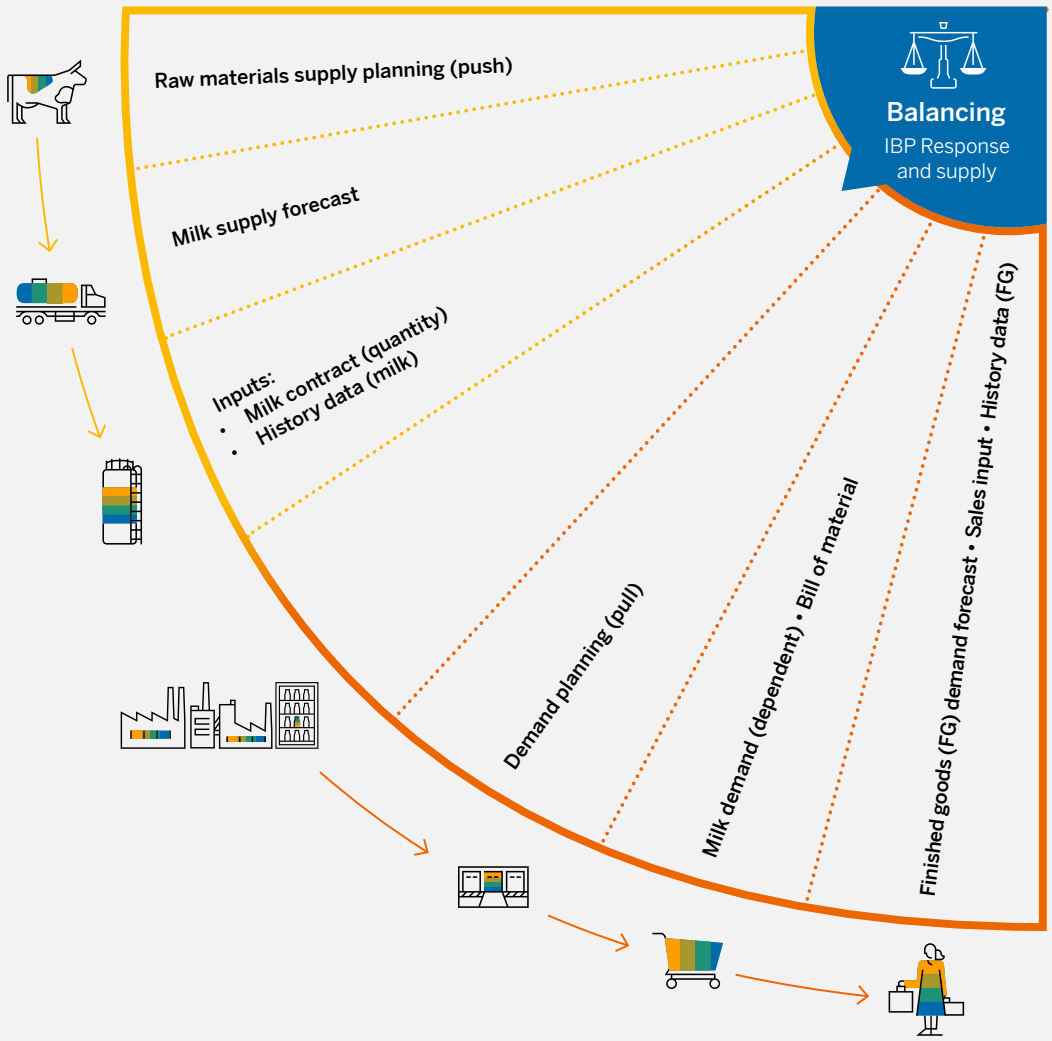
Optimization for Resilience

One key to resilience in the face of ever-increasing disruption is to optimize operations based on the availability of raw materials such as raw milk, cream, and fat (see Figure 10). Here, early identification of demand and supply imbalances is critical.

On a weekly basis, dairy producers will analyze inputs and outputs to remain in balance – while also doing long-term planning and making adjustments as needed.

When an imbalance is identified, it is the ability to respond early – perhaps taking advantage of lower prices on the spot market – that is a key attribute of resilience. Organizations that can move fast while still finding opportunities to take advantage of lower prices in the market are those that will succeed.

Figure 10: Supply Chain Optimized for Resilience



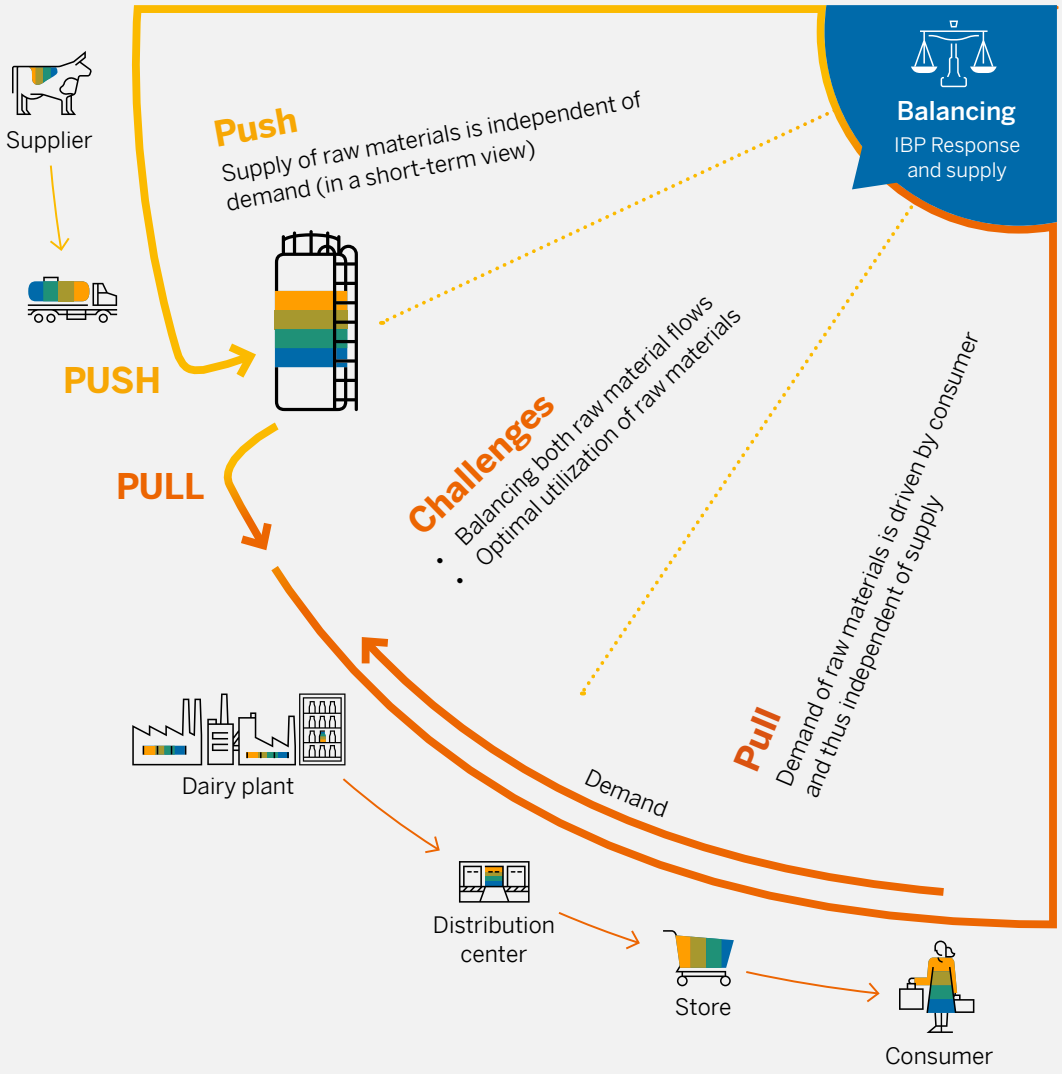
Optimization for Profits

In this model, organizations prioritize production decisions with the goal of maximizing marginal profits (see Figure 11). Here, planning is driven by demand, and an alternative bill of materials is used to optimize the utilization of milk and maximize the output of finished product.

Optimization for Sustainability

Many dairy producers want their operations to reflect their commitment to sustainability. This means optimizing for inbound and outbound transport, better utilizing resources (no empty containers), and reducing emissions by reducing total distance traveled using smart route planning. Better resource utilization not only helps the environment but also minimizes costs.

Figure 11: Dairy Supply Chain Optimized for Profits



How SAP® Solutions Can Help

To stay ahead in today's dairy market, leading producers are embracing the experience economy, which prioritizes customer experiences over products. Industry leaders seek to build sustainable relationships with consumers that move beyond transactions to deliver valuable experiences and outcomes.

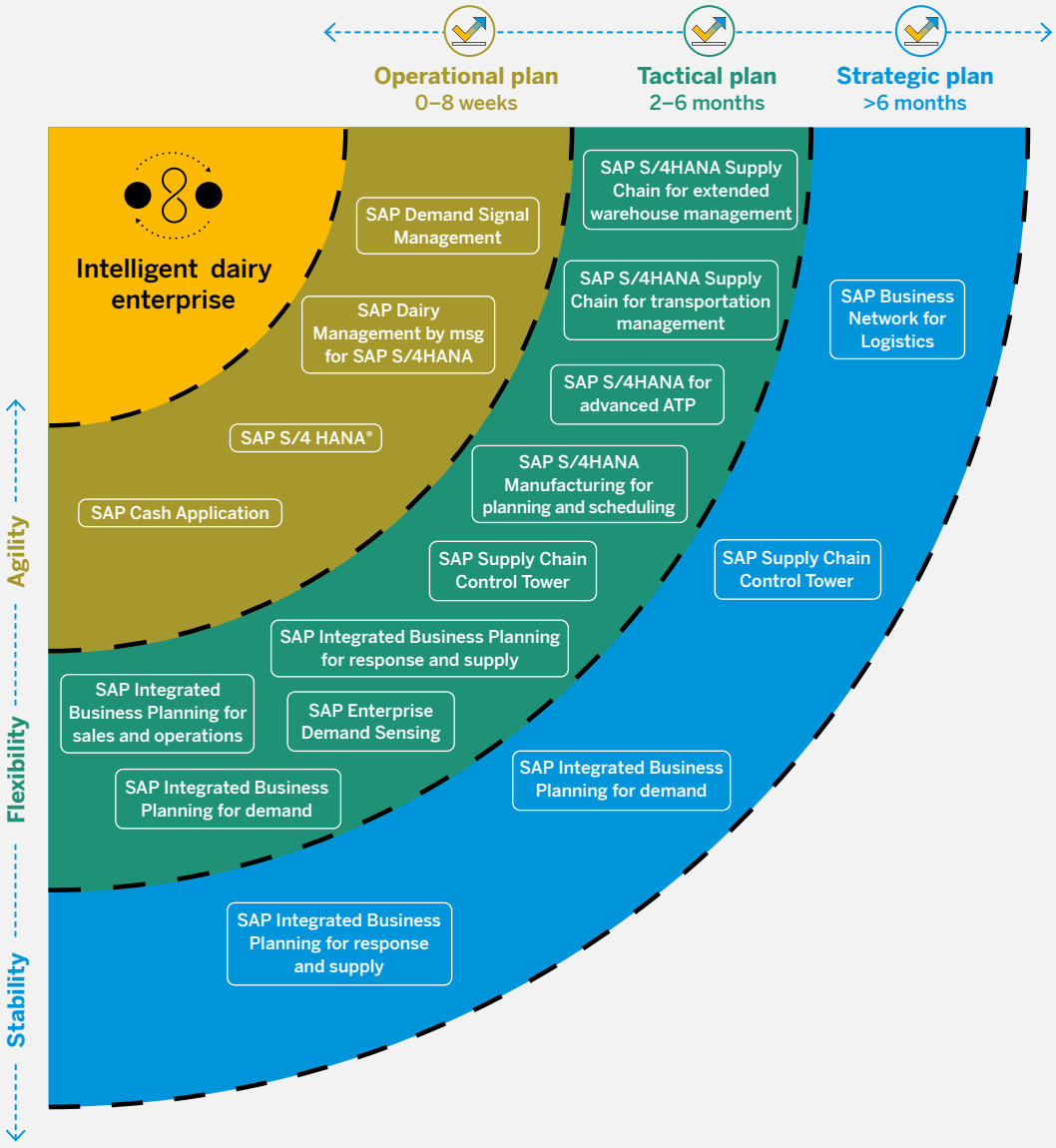
But how do you transform operations to seize this opportunity? SAP® solutions can help. We can work with you to create the responsive design-to-operate processes that are the backbone of a resilient and customer-centric supply chain.

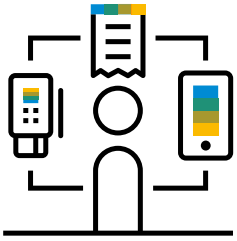
We can help you:

- **Synchronize planning company-wide**: Integrate customer input, demand signals, finance, sales, service, and logistics across your supply chain to improve your speed and responsiveness.
- **Reinvent production and services**: Use intelligent assets, processes, and Industry 4.0 best practices to increase dairy output while quickly adapting as demands and priorities shift.
- **Redefine trading partner collaboration**: Connect your supply, logistics, and asset management partners on a unified business network that uses dynamic workflows and real-time data to increase the pace of dairy operations.
- **Operationalize sustainability**: Embrace ethical sourcing and embed sustainable production practices throughout the design-to-operate process to reduce your carbon footprint and realize your reusability goals faster.

Our solutions for business planning and supply chain management stand out for comprehensive functionality on a common platform supported by leading technology (see Figure 12).

Figure 12: Solutions for Risk-Resilient Supply Chain Planning in the Dairy Industry





Dairy producers seek omnichannel marketing capabilities to reach and interact with customers in a seamless fashion across all channels, devices, and platforms.

Here's what you can expect:

Common user experience
- Single planning view across functions
- Shorter learning curve and faster time to productivity
- Fewer mistakes and intuitive navigation across planning and execution

Process interoperability
- Direct linkage among planning and operational systems, contextual navigation, and embedded process management
- Synchronized planning to harmonize business and production plans with materials requirements planning
- Multi-enterprise planning that connects your supply network with planning
- Collaboration across planning and finance to share cost assumptions and revenue and operating plans

Unified data model
- Common data model for planning and execution
- Simplified real-time integration

Common platform
- Faster time to value with rapid capability delivery and lower TCO
- Unified and cohesive experience across the business

Differentiated capabilities
- Planning based on live transactions for real-time insights and responsiveness
- Tight interoperability with ERP to better tie planning to the business

Global community of practice
- Broad partner ecosystem
- Global customer and industry community

Today, there is a tremendous opportunity for the dairy industry to reshape supply chains – making them more resilient and sustainable. At SAP, we are excited to support you in your journey with our comprehensive solution portfolios and strategies to help you build supply chains that are predictive, efficient, intelligent, flexible, and easier to manage.

LEARN MORE

To find out more about SAP solutions for business planning and supply chain planning, reach out to your SAP representative or visit us **online**.

Studio SAP | 84622enUS (23/07)