

# Integration

## How ERP & TMS Integration Form a Strategic Partnership

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bluegrace logistics | eBook

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# Integrating ERP with TMS to Form a Strategic Relationship



## Introduction

**W**ith the bouquet of technology solutions available today, it is becoming more and more difficult to understand which one or combination is the right one for your business. Every so often, a business must take stock, analyze the trends and ensure that it has the correct combination of solutions that will give it the edge over the competition.

Therefore, in order to effectively understand business needs in the present day, it might be clever to historically trace the evolution of the supply chain process, how it has interacted with technology over the years and how it has changed accordingly.

**This eBook aims to showcase the technological progression of systems and processes** in the logistics industry up to the present day **and offer recommendations for the future course of action.** It will attempt to familiarize the reader with the needs and thought processes that resulted in the creation of various technological solutions that improved the way the supply chain functioned. It will also showcase how these solutions improved the efficiency of the movement of goods and gave rise to specialized functions that were the need of the hour through the course of history.

# The ERP Is Being Used By Thousands Of Organizations To Manage Business Information

It is evident that over the last 3 decades, the pace and frequency at which technological changes have occurred have increased manifold. For the logistics sector, **Enterprise Resourcing Planning (ERP)** software has progressed into large-scale systems that form the foundation for the majority of modern businesses. The ERP, a nearly ubiquitous system, is now being used by thousands of organizations to manage business information, thereby, providing a high-level view of company activity and performance. The truth is that ERPs are great at managing core business functions, but were they designed to handle complex transportation requirements? The answer to this is most certainly, no.

As you delve deeper into this eBook, **you will understand the compelling need to integrate Transportation Management Systems (TMS) with an ERP** and how the transportation management capabilities in your ERP fall short in providing the functionality needed to address the complex requirements in managing shipping, logistics, and transportation.

When they work together, an ERP-TMS combination can help form the best possible technology infrastructure to enable you to leverage data from both systems, gain greater visibility, and to ultimately drive better, faster decisions and keep up with the speed that modern commerce demands.



*Choosing the right partner for implementing your ERP system is almost as important as selecting the right software in the first place. Connect with BlueGrace today to learn more about our full-service supply chain management program.*

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## CHAPTER 01

# ERP

*enterprise resource planning*



## Origin & Problems it Solved

With the bouquet of technology solutions In the 1960s, the focus on factory output increased, which led to the birth of computing. There was now a felt need to manage and balance production and customer demand. The resultant effect was the development of applications that handled inventory management and control. Software, known as **Materials Requirements Planning – or MRP** was created. These early computing programs helped plan manufacturing, purchasing, and delivery. This, in turn, enabled organizations to reduce their stock levels to the minimum, which in turn reduced the amount of money tied up in inventory.

**In 1972, SAP was born in Germany.** The company initials stood for “Systemanalyse und Programmentwicklung”, or “**Systems, Applications & Products in Data Processing**”. It was founded to create a standard application software for real-time business processing or to build business software that worked in real-time. In an era of reel-to-reel tapes and punch cards, real-time working was something that had not been done before. After the advent of SAP, there was no turning back.

By 1975, MRP software was running in 700 companies. It was only affordable for the large manufacturers and ran on enormous mainframe computers that did not even have the computing power of a present-day laptop. However, the benefits that this MRP

software brought was worth the time, effort and capital investment it demanded.

In the 1980s, MRP evolved into Manufacturing Resource Planning (MRP II) because manufacturers realized the need for the system to reach broader aspects within the company. MRP II expanded to encompass functions such as invoicing, payroll, detailed capacity planning, scheduling and shop floor control.

## Definition of ERP

**In the 1990s, the term Enterprise Resourcing Planning (ERP) was coined by [Gartner](#).** It was defined as *‘the ability to deliver an integrated suite of business applications. ERP tools share a common process and data model, covering broad and deep operational end-to-end processes, such as those found in finance, HR, distribution, manufacturing, service, and the supply chain.’*

ERP applications automate and support a range of administrative and operational business processes across multiple industries, including the line of business, customer-facing, administrative and asset management aspects of an enterprise. ERP deployments are complex and expensive endeavors, and some organizations struggle to define business benefits.

Gartner specifies that organizations must look for business benefits in four areas: a catalyst for business innovation, a platform for business process efficiency, a vehicle for process standardization, and IT cost savings. Most enterprises focus on the last two areas because they are the easiest to quantify; however, the first two areas often have the most significant impact on the enterprise.

ERP systems tie together a multitude of business processes and enable the flow of data between them. By collecting an organization's shared transactional data from multiple sources, **ERP systems eliminate data duplication and provide data integrity with a single source of truth.** Back then, the concept applied to inventory management and control in the manufacturing sector. Software engineers created programs to monitor inventory, reconcile balances, and report on status.

## ERP Implementation

An ERP implementation involves installing the software, moving your financial data over to the new system, configuring your users and processes, and training your users on the software. Choosing the right partner for implementing your ERP system is almost as important as selecting the right software in the first place. It can take anywhere between 6 months to up to 2 years to implement, depending on the size and structure of the organization.

## PC Bennet details the stages of ERP implementation as follows:

**Discovery and Planning** - This first phase begins during the sales process and then continues post-sale. During this period, the project team will be created. There will be initial meetings and documentation developed as the team works to identify current issues and potential solutions. An important part of this phase is constructing the project plan, which will serve as a guide throughout the rest of the project.

**Design** - What will the new enterprise-wide system look like and how will it be used in the organization? In the ERP Design phase, the project team and implementation team will be working out the various configurations for the new system, defining roles, and documenting standard procedures.

**Development** - The purpose of the development phase is to prepare the entire system for going live. This includes activities such as completing any necessary customizations, developing user training, and importing data. With ERP implementations, like any custom software development projects – *“First, Solve the problem. Then, write the code.”*

**Testing** - Is the system's functionality aligning with the set requirements for the project? The Testing and Development phases

will often overlap, as the implementation and project teams jump between the two – constantly fine-tuning the configuration. By the end of this phase, project team members will be comfortable doing their jobs in the new system. This is the final step before diving into the live system.

**Deployment** - The project team and implementation team will assess the situation and make the final go or no-go decision. Prior to going live, the final data will be loaded and validated. The project team will train other employees who will then start working in the new system, and completely stop using the old one.

**Ongoing Support** - Once the ERP system has launched, the purpose of the project team will shift. Over time, as the way the users work within the system evolves, adjustments and changes to the system configuration may be needed.

## ERP Today

With the **global ERP software market expected to be worth \$41.69 billion by the year 2020**, the impact of these systems is evident. It is important to note that new ERP systems are anything but basic. They use the latest technologies that include machine learning and AI that assist with providing intelligence, visibility, and efficiency across every aspect of a business. It is also important to understand that if you choose the right solution the importance of ERP systems far outweighs the initial cost, time and effort involved in its implementation.

**Today, ERP systems are becoming even more advanced.** They are often cloud-based, delivered via the **software as a service (SaaS)** model and have remote, web-based access via advanced apps that run on mobile devices. They are extremely flexible, and every vendor's tool is different. Each application aims to provide organizations with a powerful, real-time tool that runs a single, shared database of information for the entire enterprise.

Modern ERP solutions address include under their umbrella of offerings manufacturing, supply chain, financial and accounting capabilities, etc. They include advanced reporting and business intelligence; sales force and marketing automation; **Customer Relationship Management (CRM)**; e-commerce; and service and warranty management.





## CHAPTER 02

# TMS

*transportation management systems*

## Origin & Problems It Solved

Distribution companies, e-commerce organizations and other players that move freight on a regular basis realize that there are many interconnected components in the shipping process that form a complex whole. **From quoting to delivery, parties involved in shipping freight are almost always looking for ways to optimize spend and improve processes.** Transportation Management Systems (TMS) offer shippers a solution to do just that.

TMS was first introduced in the 1980s as a way to more affordably and easily move freight between trade partners. The basic premise behind TMS has not changed much since the solutions were first introduced more than three decades ago, but the way in which the software manages the tasks, oversees activities, and reports back to its users has improved. However, from then till now, much has changed, and these systems have become more specialized, affording users deeper insights with respect to complex shipments and difficult freight movements.

**A Transportation Management System (TMS) is a platform that was specifically designed to streamline the shipping process.** It is a subset of supply chain management that focuses only on transportation solutions. The TMS enables customers, suppliers, and carriers to collaborate using one platform by offering complete visibility and control of their shipping operations.

## TMS Overview

TMSs play a central role in supply chains, affecting every part of the process—from planning and procurement to logistics and lifecycle management. The broad and deep visibility afforded by a powerful system leads to more efficient transportation planning and execution, which results in higher customer satisfaction.

That, in turn, leads to more sales, helping businesses grow. With such a dynamic global trade environment that we live and transact in, it is important to have a system that allows businesses to successfully navigate complicated processes around trade policies and compliance.

**A TMS PAINTS A KPI/METRIC-BASED PICTURE OF THE ENTIRE END-TO-END SUPPLY CHAIN**

## TMS in Use

**A TMS allows shippers to automate the processes they have in place and receive valuable insights to save time and reduce spends on future shipments.** It helps companies move freight from origin to destination efficiently, reliably, and cost-effectively.

TMS encompasses solutions for moving freight in all modes and also includes intermodal movements. The TMS processes include freight transported inbound or outbound, domestically or internationally; using transportation assets owned either by the company or an outside service provider. The freight managed by a TMS ranges in size from parcels to bulk commodities. Perhaps no other supply chain application offers so many ways to save money or drive value. However, the main reason companies implement a TMS is to reduce freight spends.

A TMS achieves these savings based on process enforcement, analytics, and optimization; with virtually no other supply chain application offering so many different forms of optimization. It provides visibility in day-to-day transportation operations, ensures the shipment is compliant, proper documentation is available, there is trade compliance information and documentation, and timely delivery of freight and goods. TMSs make it easier for businesses to manage and optimize their transportation operations, whether they are by land, air, or sea.

## The Future of TMS

Customer expectations keep rising, not only for on-time deliveries but for two-day and even same-day deliveries, with real-time updates provided throughout the shipping process. Ever-changing global trade regulations are also forcing supply chains to innovate to keep pace, often by investing in a transportation management system.

Transportation management systems must become more robust and feature-rich, providing faster responses to consumers and more detailed information to businesses. Machine learning enables TMSs to be more intelligent, providing better recommendations and more accurate predictions. Companies can choose to integrate their transportation and global trade management systems with emerging technologies to further improve visibility and offer better customer service.

**Some of these innovative technologies that are currently available include:**

**IoT Fleet Monitoring** - Internet of things (IoT) devices and sensors make real-time fleet monitoring commonplace, including in-transit visibility of driving conditions, routes, and assets. Companies can lower their fuel and maintenance costs, as well as reduce delays and improve driver safety.



**Digital Assistants** - Digital assistants are often called chatbots, and offer immediate, conversational responses to shipment information, leading to higher customer satisfaction.

**Adaptive Intelligence and Machine Learning** - By applying machine learning to historical data and trends, transportation management systems can predict transit time more accurately, plan capacity, identify at-risk shipments (such as goods that are about to expire and time- or temperature-sensitive products), and much more. Enhanced artificial intelligence will also enable your TMS to provide more accurate and informed recommendations, such as alternate delivery routes during high traffic periods.

**Blockchain** - Blockchains are now being utilized to build complex integrations among shippers, customers, and carriers. Applications such as intelligent track and trace increase transparency and traceability across your supply chain, but still ensure accurate and secure information.

**Cold Chain Management** - Another blockchain solution available in transportation management systems is cold chain management, which is useful when different temperatures need to be maintained at various checkpoints along the supply chain. For instance, perishable or temperature-sensitive materials and products might need to be kept at a cool temperature in the truck but a slightly higher temperature on store shelves. With cold chain management, the temperature can be monitored across the supply chain, with real-time information provided to the business and the regulators at the country of origin.

An aerial photograph of a complex highway interchange with multiple lanes and overpasses. A semi-transparent blue rectangular overlay covers the center of the image. In the bottom left corner, a small graphic of a green circuit board is visible, with the text 'R6572' printed on it. The main text is centered within the blue overlay in a large, white, sans-serif font.

**A TMS PLAYS A CENTRAL ROLE  
IN SUPPLY CHAINS, AFFECTING  
EVERY PART OF THE PROCESS**



## CHAPTER 03

# ERP

*erp without tms*

Vendors that deal with ERP systems often tout them as “one-stop” shops that offer a multitude of capabilities, including TMS. However, an ERP is designed to manage business transactions. Its focus is on facilitating data flow between the different business units. While the ERP provides certain benefits like automating processes, reducing data entry errors, duplication of tasks and offering a centralized data center, it often does not provide the analytics, visibility, and operational functionalities that are now required to monitor and manage complex logistics, transportation, and supply chain structures. **Therefore, by integrating the right TMS, the organization also gains full control and visibility of its supply chain.**

A company may buy into the promise of a do-it-all ERP as an easy, low-cost alternative to a dedicated TMS. However, the realities of the overall cost, project length, lack of necessary functionality, and poor adoption by the supply chain department, make such a decision suboptimal.

Mainstream ERP systems manifest glaring gaps in transportation management functions, which is why they have failed to deliver the magnitude of value that a dedicated TMS system brings. An ERP may share some common features with a transportation management system, but it has limited capabilities. **ERPs are not designed to handle shipping complexities that modern TMSs can manage. By integrating an ERP with a TMS, businesses will be cutting costs, saving time and providing more efficient services to customers.**

A study by **Ohio State University’s Jim Hendrickson** reported **86%** of the respondents believed their ERP needs to be supplemented with other supply chain execution automation. In fact, the report mentions that an external TMS solution is most often cited as the system needed to augment the ERP software.

## There are four main reasons why integrating a stand-alone TMS with an ERP is the best option:

1. Provide visibility across the transportation value chain
2. Accelerate implementations and realize ROI faster
3. Deliver critical functionality
4. Achieve unrealized value/savings/ROI

The survey results are part of a larger study led by Jim Hendrickson, professor at The Ohio State University’s Fisher School of Business. Hendrickson wanted to determine the value of **Supply Chain Execution (SCE)** systems within the context of an ERP. **They asked survey respondents to rate the value of each system based on business value and cost savings**, with the business value being defined as the direct value the system has in allowing the business to better manage the complexity of their supply chain. Cost savings were measured in terms of the reduction of cost for a function the system was intended to manage.

Hendrickson's study set out to understand how businesses define, evaluate and acquire Supply Chain Execution software. Within that framework, he wanted to understand the approaches that companies took to develop and justify technology buy decisions.

The Hendrickson team surveyed a cross-section of industries, including transportation, supply chain consulting, supply chain services, manufacturing, and retail. **The survey included companies that had revenues ranging from less than \$100 million to more than \$1 billion.**

### Key findings include:

The top 3 systems identified as critical/very important include: ERP at 92%, WMS at 72% and TMS at 67%. 86% don't believe that ERP is enough to manage the modern complex supply chain. 92% said that TMS was required to increase the specialization of an ERP. 81% identified TMS as the system that offers the most business value.

The above findings prove that while forming the backbone of most modern businesses, ERPs lack key functionality with respect to supply chain management capabilities, including transportation management.



## CHAPTER 04

# ERP

*erp with tms*



**A Transportation Management System (TMS) is specifically designed to manage and monitor complex freight movement across widespread supply chains.** It goes a step further than simply automating processes. A dedicated TMS helps in enhancing transportation efficiency, providing real-time dashboards, enabling better decision-making, and handling numerous tasks that cannot be addressed by ERP systems.

As the supply chain evolves, the range of operations that it encompasses will increase at a rapid pace. Democratizing basic shipping features for all size businesses goes far beyond just cost savings, though those are difficult to ignore, especially over short time intervals.

## **Removing the enormous basic shipping function weight from the shoulders of logistics teams also lets them:**

- Focus on developing a flexible supply chain that can meet the fluctuating needs of suppliers and customers to boost sales and elevate customer service.
- Use cost savings to invest in other lifeblood functions such as R&D to create new products that would lead to new sales channels that would lead to greater revenues.
- Identify technologies and best practices that can be implemented to enhance and advance the way their companies do business.
- Free staff to turn their attention to other aspects of their freight

- shipping operation that could be made more efficient.
- Change the view of the logistics department from a cost center to a profit center.

## **A TMS provides many benefits to businesses. Some of the top benefits are:**

- Reduced costs for the business and the end customer.
- Simplification of supply chain processes across geographies, modes, and carriers.
- Automation of business operations for faster and more accurate billing and documentation.
- Improvement in visibility and security, especially in transit.
- Time savings—fewer manual steps result in fewer delays and faster delivery times.
- The ability to track freight, both locally and globally, on a single platform.
- Better import and export compliance minimizing penalties and shipment delays.
- New business insights as better reporting lead to faster action and process improvement.
- Improvements in customer service and customer satisfaction with real-time updates and fewer shipment delays.
- The ability to scale the business by meeting and exceeding customer demands for fast, on-time shipments.



## A DEDICATED TMS HELPS IN ENHANCING TRANSPORTATION EFFICIENCY AND ENABLING BETTER DECISION-MAKING

### The benefits of a TMS implementation in each area are:

**Technological Capabilities** - With a transportation management system, the shipper will have the technology needed to make routing decisions based on quotes, transit time and carrier mix. This centralized location for quoting will eliminate unnecessary stress and time spent during the booking process.

**Simplify Processes** - A TMS can help to simplify the carrier selection process by allowing you to evaluate the merchandise being sent and matching it with a carrier in the network. By managing this entire process in one place, you will be able to revisit past shipments and quickly match similar loads to the appropriate carriers.

**Track Freight** - With a TMS, you can track freight that's on the road and even receive alerts to any transit exceptions or unforeseen delays from one location. It's impossible to control human error or Mother Nature, however, a TMS will let you see when delays are occurring and why.

**Business Intelligence** - Robust transportation management systems will offer you in-depth insights and reporting capabilities. For example, let's say you oversee the shipping process for 20 locations that each send five shipments out a week. That's 100 shipping invoices to create and shipments to evaluate each week. With a TMS, the information will all be stored in one location and custom reports can be created to analyze things like the discrepancies between rates and final invoices.

## CHAPTER 05

# CASE STUDY

*bluegrace & peavey electronics*





## Consumer Electronics

Consumer electronics manufacturer finds itself needing a more cost-efficient transportation management program.







# bluegrace<sup>®</sup>

## CASE STUDY

## The Peavey Electronics Case Study

05

### Overview

Founded in the 1960's, Peavey Electronics found itself needing a more cost-efficient transportation management program. Peavey started out as a one-man shop, but quickly became a global supplier of music and sound equipment.

The family run business is one of the world's largest manufacturers and suppliers of musical instruments and professional sound equipment. Peavey's innovation and total dedication to the quality and reliability of their electronics have made them cutting edge in their industry.

### Supply Chain Scenario

Peavey manufactures over 2,000 products, distributes to over 130 countries, and has earned more than 180 patents worldwide. Staying true to their home roots, Peavey operates from their Meridian, Mississippi-based headquarters.

### The Challenge

Peavey was using an antiquated static routing method and shipping with two national carriers that split outbound deliveries between east and west. However, their supply chain needed some modernization in order to keep up with the demand. BlueGrace Logistics stepped in to provide a more modern and efficient supply chain management program.

## Customized Program Opportunities:



BUSINESS  
INTELLIGENCE



ANALYTICS  
CONSOLIDATION



CARRIER  
RESEARCH



SYSTEM  
INTEGRATION



COST  
REDUCTION



PROCESS  
OPTIMIZATION

## The Solution: TMS

### A Seamless Transition to Integration

Peavey was already working with an SAP integration partner that BlueGrace also partners with, so the transition and integration was seamless. BlueGrace was able to utilize their existing SAP integrated platform and tie it into their TMS.

### Comprehensive Engineering Analysis

Using Peavey's incumbent shipping data, the BlueGrace dedicated operations team performed a comprehensive Supply Chain Engineering Analysis as part of the Financial and Operational Assessment.

### Process Improvement Opportunities

The results of the analysis uncovered several opportunities for process improvement and cost savings within their current state. BlueGrace then monetized the opportunities and clearly defined the process by which Peavey would achieve their optimal Future State from Current State.

*"Being integrated with BlueGrace's TMS through SAP and ShipERP has really streamlined our processes at Peavey. It allows everyone from Customer Service to our Shipping Department instant access to our network of carriers, our rates and transit reports - all under a single management platform."*

- Robert Muirhead  
ERP Applications Manager,  
Peavey Electronics

## The Results

### Advanced Carrier Network

Using BlueShip®, the BlueGrace proprietary TMS platform, BlueGrace was able to implement a carrier network using both National and Regional carriers and the use of Dynamic Routing Technology to determine Best Value Carrier selection.

### Cost & Transit Time Reduction

This resulted in an immediate freight cost reduction as well as reduced transit times for product to reach their customers. The freight cost reduction was immediate and impactful in year one, but not sustainable year after year.

### Rate Mitigation & Service Strategy

The goal for managing freight cost becomes a mitigation strategy to fend off Carrier rate increases, while maintaining a high level of service and seeking cost savings from strategic initiatives.

### Continuous Freight Cost Reduction

BlueGrace, acting in a trusted advisor capacity, continuously looks for additional ways of driving cost out of a customer's Supply Chain beyond freight rate reduction.

### Analytics with Actionable Data

With the seamless integration between SAP and BlueGrace, they have access to the customer's data flowing through their TMS in real-time. Taking that raw data and turning it into actionable data is the key to Business Intelligence. Feeding Peavey's data into its VISION™ Business Analytics software allowed BlueGrace to create customized dashboards to fully understand their specific KPI's and their impact on the business.

## Enhanced Visibility through Business Intelligence

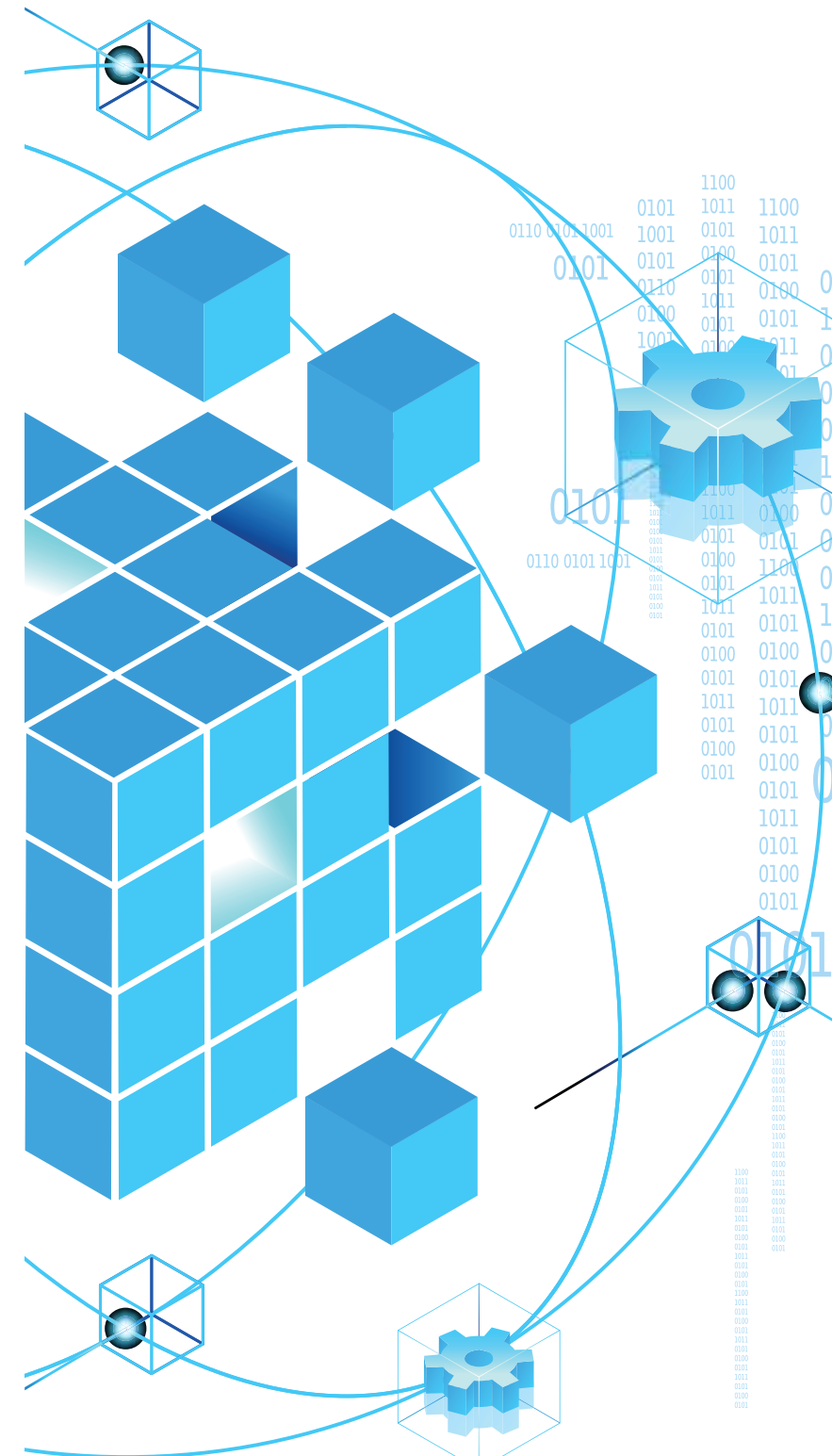
VISION, combined with the power of SAP, provides Peavey with unsurpassed visibility to their Supply Chain and Logistics operations. This enhanced visibility allows BlueGrace to see opportunity and make recommendations for strategic initiatives that reduce waste and improves overall profitability.

**When a company partners with BlueGrace as their Managed Transportation provider, they allocate dedicated resources to the account. In addition to an Operations Team trained on a customer's SOPs for effective account management, they provide Carrier Procurement & Management, Freight Bill Pay & Audit, Consolidated Invoicing, Claims Management, Business Intelligence Reporting and TMS Integration.**

The TMS integration with SAP was critical to the success of the Managed Transportation program for Peavey Electronics. Native integration allows Peavey to work within their everyday ERP environment without having to use external software or websites to manage their logistics operations from start to finish.

“The setup process to integrate SAP with BlueShip (the BlueGrace TMS) via ShipERP was seamless, and managing the integration today is equally so. It required minimal IT resources from Peavey to complete the integration and has saved us countless hours when booking shipments.”

- Robert Muirhead | ERP Applications Manager, Peavey Electronics





## CHAPTER 06

# VALUE

*reccomendations for adding value*

# Recommendations For Adding Value

06

In an [article](#) titled *2019 Transportation Management Systems (TMS) Market Update: Keeping Pace with the times published in Logistics Management*, Amit Sethi, Senior Manager Supply Chain, Capgemini, shares why TMS is of interest to shippers:

*“In essence, a TMS paints a KPI/metric-based picture of the entire end-to-end supply chain, all while sitting outside of the four walls of the enterprise and warehouse. It also interacts with trading partners in the value chain—vendors, customers, freight providers and carriers—thus creating a complete loop that logistics professionals can turn to as a reliable source of data and intelligence. We’re definitely seeing more shippers harness this TMS capability and then use it as a good data source for how the entire supply chain is performing. This trend is helping to drive TMS functionality as a whole right now, and is prompting vendors to weave such capabilities into their solutions.”*

The same article has Janelle Ballerstedt, Sensata’s global logistics and TMS project lead sharing why they felt the need for a TMS “We were working in silos. If we were shipping direct to a customer, we did not know what our options were with onsite carriers, who could provide next-day delivery, or what the costs looked like. We just did not have the visibility that we needed.”

In 2017, BlueGrace helped a customer from the consumer electronics industry [integrate](#) their TMS, BlueShip, with SAP.

Within 10 months of integrating BlueShip with SAP, they were able to identify a multitude of cost-saving opportunities and improve efficiency for the customer. The BlueGrace team projected an 11% annual cost savings for the customer, and they are on track to exceed these estimates. The examples above aptly highlight the benefits of deploying a TMS to manage transportation.

**Here are some more value additions that give you a reason to integrate TMS with your ERP:**

**Faster processing of shipments** - When your ERP is integrated with a TMS, the data from a sales order can be easily transferred in the TMS to book freight. This reduces manual data entry and the scope for errors in freight booking.

**Multiple Carrier Comparison** - An ERP may allow you to choose a carrier from a list of options, a TMS, on the other hand, enables you to compare costs, transit time, routes, and past performance for multiple carriers, thus ensuring that you can select the most optimum carrier for any given shipment.

**Enhanced Visibility** - ERP and TMS integration gives a complete overview of the order. For example, you can have access to the customer's information and the transportation details at the same time. An integrated system allows you to track the order from the time it was entered into the system as a sales order till the time it is delivered to the customer.

**Analytics** - This is one of the main reasons why the need for a TMS is felt by organizations that have an ERP. A TMS provides a suite of data analytics tools and reports that can help you monitor transportation trends and identify outliers. These tools can help you find opportunities to reduce costs and improve efficiency. For example, you can get reports by lanes, transit time, costs, state-wise shipping data, and carrier-wise shipping data.

**A Common Platform** - Another important benefit of a TMS integration is that it brings all the stakeholders like your logistics

team, transporters, suppliers and vendors, customers, and the TMS providers team on a single platform. This reduces time in transferring data or information from one party to the other. It also reduces the scope for errors and incorrect information from creeping into the system.

**A Complete Logistics Suite** - Since TMS is designed to manage complete end-to-end transportation, it comes equipped with facilities to book shipments requiring multi-modal transportation. For example, you can book a shipment requiring road transportation and sea transportation in the same booking. You don't need to create separate freight bookings for it.

In short, while an ERP gives you control of the other functions of your organization, a TMS eases your day-to-day transport planning, operation, and offers a real-time view of your logistics function. The integration also enables you to get a better comparison of your transportation expenses vis-a-vis your sales performance. Since manual intervention is greatly reduced when the systems are combined, it increases data hygiene ensuring that you have access to accurate and real-time data. The ERP and TMS together offer complete visibility of your business, enabling faster and informed decision making.

## Conclusion

There's little doubt that the future is upon us in the transportation management industry, as wave after wave of businesses experience the control and visibility offered by TMSs. As customer demands continue to increase and the supply chain gets more specialized and complex, organizations must keep themselves informed, improve systems and employ the best practices needed to make them leaders in the supply chain.

A TMS integrated with an ERP has the best of both options without their downsides. Even though reducing freight costs is a standard value proposition for TMS, there are many other forms of direct and indirect ROI that such solutions present, including higher customer satisfaction, improved supply chain visibility, and enhanced operational efficiencies. When you carefully consider all of the people involved in managing the daily workflow and how it will improve their effectiveness, the time and money spent on a robust transportation management platform will pay off on several fronts.

Business needs change and the rigid transportation processes in the ERP inhibit the growth of the organization. On the other hand, the dynamic TMS solutions of today allow rapid change of the transportation model enabling the business to adapt and grow. A dedicated TMS stands as the only “one-stop” shop for real-time visibility of shipments across trading partners, and across the breadth of the supply chain, putting you in control of your business.

The future of logistics will be marked by innovative tech and decision-makers must pay heed to the solutions that will make that crucial difference to their organizations in the long run.





# CONNECT WITH US

*learn more about our full-service supply chain program*

## About BlueGrace

BlueGrace Logistics offers customizable transportation management solutions as a full-service Third-Party Logistics (3PL) provider that helps shippers manage their freight spend through industry leading technology with a large network of established carriers across the country. With 12 offices strategically located in major transportation hubs across the U.S., including national headquarters in Tampa, BlueGrace serves over 10,000 customers annually through its proprietary technology platform, BlueShip®, that has connectivity with more than 250,000 carrier suppliers. BlueGrace is part of the technology portfolio of Warburg Pincus, a leading global private equity firm.

*For more information, visit [www.mybluegrace.com](http://www.mybluegrace.com)*



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