HIGH PERFORMANCE ORGANIZATION (HPO) BEST PRACTICES

PEOPLE ARE THE HEART OF THE SUPPLY CHAIN

A WHITE PAPER BY THE GLOBAL SUPPLY CHAIN INSTITUTE

IN THE GSCI SERIES:
PEOPLE IN SUPPLY CHAIN
NOVEMBER 2019
HIGH PERFORMANCE ORGANIZATION (HPO)
BEST PRACTICES

TABLE OF CONTENTS

Executive Summary 3
Introduction 5
HPO Principles 6
History 8
Mega-Trends Impacting HPO 14
Best Practices 20  
Case Study 40
Summary 45
HIGH PERFORMANCE ORGANIZATION (HPO) BEST PRACTICES

PEOPLE ARE THE HEART OF THE SUPPLY CHAIN

IN THE GSCI SERIES:

PEOPLE IN SUPPLY CHAIN

NOVEMBER 2019

AUTHORS:
MIKE BURNETTE
MIKE POLICASTRO
TIMOTHY P. MUNYON, PhD

CONTRIBUTING EDITOR:
TED STANK, PhD

RESEARCH ASSISTANT:
FALLON REEVES
THE GAME-CHANGERS SERIES

Game-Changing Trends in Supply Chain
Bending the Chain: The Surprising Challenges of Integrating Purchasing and Logistics
Managing Risk in the Global Supply Chain
Global Supply Chains
The ABCs of DCs: Distribution Center Management
Supply Chain Talent: Our Most Important Resource

STRATEGY SERIES

Advanced Demand/Supply Integration (DSI) Best Practices
Supply Chain Integration Strategy Best Practices
End-to-End Supply Chain Planning Framework and Key Concepts
Driving Shareholder Value with Your Supply Chain

THE INNOVATIONS SERIES

Platform Lifecycle Best Practices
Selecting and Managing a Third Party Logistics Provider Best Practices
Creating a Transparent Supply Chain Best Practices
Transportation 2025 Megatrends and Current Best Practices
New Product Initiative Best Practices
End-to-End Supply Chain Collaboration Best Practices

TECHNOLOGY IN THE SUPPLY CHAIN SERIES

New Supply Chain Technology Best Practices
A SAVVY Guide to the Digital Supply Chain

These white papers can be downloaded by going to the publications section at gsci.utk.edu.
Executive Summary

People are the heart of the supply chain. Manufacturing, procurement, warehousing, and transportation are people-intensive elements of supply chain management (SCM) organizations. Consequently, the SCM team is now the largest employee group in many companies. It is safe to state that the performance of the SCM organization is directly linked to its individual and team capabilities.

The University of Tennessee’s Global Supply Chain Institute (GSCI) works with 100s of companies each year. Our executive partners understand the clear link between the performance of their people and the competitive capability of the organization. This link is foundational to success for SCM organizations and their respective companies and is the subject of this white paper. Some describe this approach as high performance organizations (HPO), others use high performance work systems (HPWS).

In this paper, we will use the HPO term.

Competitive advantage can be developed by creating a higher-performing organization vis-à-vis the competition. The leading companies that we benchmarked for this white paper create advantage through these two approaches:

1. Implementing an HPO end-to-end supply chain (E2E SC) strategy, and/or
2. Improving the organizational performance as a part of the end-to-end supply chain strategy (i.e. developing a zero mindset of no defects, waste, incidents, or cost as a part of a Lean E2E SC strategy).

In this paper, we will first provide some history of supply chain organizations to provide proper context and then discuss the major trends impacting organizational performance. Our findings reinforce the need for supply chain leaders to prioritize building and maintaining “2025” high performance work systems (HPO) as a primary pathway to competitive advantage. To provide help for leaders to improve
their performance, we will seek to provide answers to the following questions gleaned from 19 field interviews with 14 benchmark partner companies from a cross-section of industries:

- Will this approach work in 2025?
- Have the supply chain challenges of the turn of the century, for example, complexity, cost fatigue, digitization, customer centrism, etc., changed the HPO best practices?
- Have baby boomer generation retirements changed employee expectations and, therefore, the HPO best practices?

Note: The paper focuses on the operational areas of the supply chain (supplier operations, manufacturing, warehousing) due to the density of people in these activities, but the insight can be applied broadly across the end-to-end system.

What is HPO? We have included a definition from David Hanna based on the frequency of its use in supply chain organizations.

**High Performance Organization (HPO) definition** — high performance occurs when: 1). Values and attributes are congruent with business and cultural objectives, and 2). The behaviors of organizational members are aligned appropriately with these values.²

---

**DEFINITIONS**

**Supply Chain**—The end-to-end system of processes and activities required to deliver product from the supplier’s supplier to the consumer’s shelf

**Supply Chain Organization**—The holistic resources and teams required to deliver products and services to the consumer with excellence. This includes, but is not limited to, procurement, manufacturing, engineering, process control, quality, safety/environmental, innovation program management, logistics (warehousing, transportation, inventory management, order fulfillment), customer service, and planning (materials, production, inventory, and category/customer).
Introduction

Organizations are facing demographic and technological shifts that necessitate change in workforce management. First, as the Baby Boomer generation readies for and transitions to retirement, the U.S. labor market will lose up to 60 million workers. As a result, organizations will lose access to the accumulated expertise and experience of these workers. This shift will also reverberate throughout the labor market, increasing competition for high-potential and high-performing employees, and particularly those with needed leadership capabilities. Second, technological shifts, including the emergence of big data, machine learning/AI, and the Gig economy, are changing the way organizations interface with workers, and also the skills required by organizations to compete effectively. These technological changes have amplified the need for an agile workforce capable of effectively interfacing with technology, understanding and acting on relevant data, and responding effectively to create customer and consumer value. This technological shift will also increase competition for skilled labor, placing significant pressure on supply chains.

The demographic and technological shifts also raise important questions concerning the manner in which organizations can and should engage the workforce, particularly in people-intensive supply chains. A primary question focuses on how to gain and retain needed human capital. At a fundamental level, organizations can no longer assume that current workforce practices will enable them to hire and retain human resources in the new competitive realities to come. Similarly, once organizations have obtained needed human capital, how should they engage with employees to produce value for stakeholders?

The GSCI is dedicated to helping organizations develop and leverage their supply chains. This is the second white paper in our “People in the Supply Chain” series, and we explore the ways in which organizations have historically leveraged the workforce to competitively differentiate themselves from others, increase organizational performance, and create value in the supply chain. Throughout the paper, we draw on anecdotal and primary empirical evidence to show what organizations have done to leverage their workforces, and then highlight actionable best practices that can be applied to enable supply chain organizations to compete effectively for talent. Although our first emphasis is on the supply chain, many of the practices identified in this paper also may be applied readily throughout other functional areas within organizations.
HPO Principles

High performance organizations are based on foundational principles that have stood the test of time. These principles are as critical today as when formed in the 1980s. The basic HPO principles may vary slightly by supply chain but include the following three beliefs.

1. Business Results Focus – Everyone in the organization is focused on improving value in the business. The focus on improvement and delivery of outstanding results is the foundation of employment security, personal career satisfaction, shareholder trust, capital for long-term improvement/investment, and personal pride. All employees strive to continuously improve results for a better life.

2. Ownership – The objectives of the company and the individual are the same. The high performance organization understands that the best resources have true ownership in the business. Business owners act differently than good employees (see popcorn company analogy below). Owners behave as if the assets of the business are their own assets, ensuring profitable solutions are implemented aggressively to drive shareholder value. Employees provide “gets and gives”:
   
   Get = Information, decision space, responsibility, resources, trust
   
   Give = business results, capabilities, creativity

   The company continuously aligns individual and company behavior and values. Everyone is externally focused on improving value.

3. Best You Can Be – High performance organizations understand that teams of people with diverse experiences and knowledge make the best decisions. Further, organizations where 100 percent of the people strive to be their best make even better decisions. All people are motivated to win and want to succeed. The company must create systems that allow people to be their best and contribute at the highest possible level. Training, promotion, career development, compensation, and reward systems focus on this long-term commitment to the development of every team and individual. Systems that create limits and “ceilings” must be eliminated.
Popcorn Company Analogy

A small business owner owns/operates a popcorn business. She makes and sells basic (buttered), flavored (cinnamon, cheese, caramel) and chocolate/nut (dark, milk, peanut, cashew, almond, walnut) popcorn, the company has one small shop in a small Midwestern town. The store is open Monday through Saturday. She has two employees (making three people in the company) trained to cover these six days. Saturday is the peak workday and the most important to revenue.

She was an early adopter of using internet sales, which exploded her business (volume and profit). She is currently completing a business renewal. The focus of this renewal is two-fold:

A. How to develop a rapidly growing business (1,000+ percent growth indexes)?

B. How to maintain growth with recent addition of 100s of new internet-based popcorn business competitors?

She decides to review several Saturday shipment examples from the last two months. Although internet orders are received daily, significantly more internet orders are placed late Friday evening for shipments that would need to be given to FedEx on Saturday evening to meet consumer expectations.

She then documents the average results for all three members of her team (owner, committed employee, good employee). The results are as follows:

<table>
<thead>
<tr>
<th>WORK COMPLETED</th>
<th>OWNER</th>
<th>COMMITTED</th>
<th>GOOD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owner does whatever it takes -</td>
<td>50</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>stays at work until all orders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>filled (works 8:00 am until 7:00 pm). She makes additional needed popcorn. She thinks about how to improve systems and capacity.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Committed employee wants to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>deliver great results. She works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from 8:00 am until all the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>popcorn is gone at 5:30 pm. She</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>understands that 4:00 pm to 5:30 pm is overtime, but the revenue made far exceeds the overtime cost. She did not make more popcorn and believes the company should figure this out.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The good employee works hard</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with high quality. She works</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>from 8:00 am to 4:00 pm (her eight hour work schedule). She looks for opportunities to improve the processes and capacity. When her workday is done, she moves on to the non-work part of her life.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

50 walk in 50 50 50
75 regular orders 75 75 75
25 “less” lead time orders 25 15 0
10 rush orders 10 0 0
makes more popcorn to fill orders  YES NO NO
Total orders 160 140 125

The owner’s review of these typical Saturday work examples has provided useful data for her business renewal. She understands that delivering all 160 orders is what the business requires. Additionally, she needs everyone’s best thinking on how to develop better systems and processes. She does not want her employees to work overtime, but she does need everyone to do what it takes to deliver the business and create long-term solutions to barriers.

Creating an ownership work system (everyone behaves like she does) is a key choice the owner can make. The owner’s business renewal will likely require multiple action plans. This Saturday peak work analysis provides the insight needed to motivate her to implement an ownership based work system.
In order to understand how work should be organized in the future, one must first understand the recent history of how work has been organized. This paper will focus on the history of HPO history over the last four decades to cover the period during which managers implemented and continuously improved high performance organizations.

Prior to 1980, the post-World War II industrial revolution was built on the capitalization of key industries (e.g., automotive, steel, etc.) and the development of improved organizational designs. In these systems (see Figure 1), managers were staffed to direct the employee work. The work was separated into clear, trainable tasks for each individual to master. Efficiency was driven by repetition, experience, and mastery (e.g., visualize an early automotive assembly line). This was the age of the traditional work system. These practices began to shift in the 1980’s; the evolution will be described in the following sections.

The year 1980 marked a time of change in supply chain organizational thinking. The external business environment was changing rapidly due to the effects of globalization/offshoring, new product categories, an energy crisis, escalation of the Cold War, higher shareholder expectations, etc. During this time, the benchmark companies for this white paper began to renew organization design practices. This renewal process began with a basic question. What does our organization believe about its people? The “theory X and Y” debate began, which led to what we now refer to as the basic HPO principles or beliefs. Supply chain leaders began to shift their thinking from operations to strategically important issues, including how to impact organizational performance positively.

This renewal process began with a basic question. What does our organization believe about its people?

Also during this timeframe, supply chains leaders broadly began to learn how to increase organizational performance. The supply chain encompassed the majority of an enterprise’s people (in most industries). Therefore, leaders sought to create increased value and/or competitive advantage from the supply chain function. At this point, most of the benchmark companies called these high commitment work systems (“commitment” limited to what leaders thought possible in ownership-based models).

This was a critical point in history, as the basic employee/company relationship would be forever redefined. Benchmark company supply chains focused on development of Self-Directed organizations highlighted by key differences in management perspective related to accountability, commitment, and ownership (see figure 1 above). Figure 2 presents an example of a set of HPO elements from an industry work system thought leader that are characteristic of such Theory “Y” systems that developed during the 1980-2000 timeframe.
### Figure 2

#### EXAMPLE 1980s HPO KEY ELEMENTS

<table>
<thead>
<tr>
<th>KEY ELEMENT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management by Principle</td>
<td>Lengthy contract, job descriptions, and rule books replaced by focused list of principles. Leadership organizational decisions and grievances resolved by principle-based leadership</td>
</tr>
<tr>
<td>Common Objectives</td>
<td>Larger percent of organization involved in goal-setting and action-planning</td>
</tr>
<tr>
<td>Teamwork</td>
<td>Creation of operational, staff, and cross-functional teams responsible for results</td>
</tr>
<tr>
<td>Multi-skill</td>
<td>Formalization of expectation that everyone needs mastery in multiple skills to enable organizational flexibility and agility</td>
</tr>
<tr>
<td>Total Task</td>
<td>Elimination of narrowly defined measures and focusing the organization on delivering supply chain excellence</td>
</tr>
<tr>
<td>Core Work</td>
<td>Definition of what the core work is (transformations that the organization uniquely delivers). Everyone (including executives and administrators) should be trained and capable of working in the core</td>
</tr>
<tr>
<td>Productive Use of Differences</td>
<td>The early diversity work in the supply chain focused on the requirement that everyone brings unique skills and experiences. We need everyone to be their best</td>
</tr>
<tr>
<td>System-Based</td>
<td>Clear systems and system owners for training, operational communications, teams, career planning, etc.</td>
</tr>
</tbody>
</table>
Beginning in the 1990s, a new line of research (e.g., Arthur, 1994; Hustled, 1995; Huselid & Becker, 1998) proposed that organizations could gain competitive advantage by bundling otherwise divergent human resource practices together. Thus, rather than seeking competitive advantage from independent human resource practices, the entire HRM function could be leveraged to enhance workforce competitiveness.

Wood and Wall (2002) characterized high-performance work systems as a group of separate, but interconnected, workforce management practices that enable heightened recruiting, selection, development, motivation, and retention. Such practices represent an outgrowth of high-involvement and high-commitment work systems, which are treated analogously (Zacharatos, Barling, & Iverson, 2005).

Two assumptions guided this work: First, the research is premised on the assumption that an organization’s workforce represents a viable source of competitive advantage (e.g., Barney, 1991; Wright, Dunford, & Snell, 2001). Thus, workforce investments, via the mechanisms of HPWS, would potentially enable positive differentiation between an organization and its competitors. Second, the research was premised on the assumption that combined human resource practices could result in positive synergies relative to independent workforce practices alone (Zacharatos et al., 2005).

The content of HPWS varies, but subsumes several categories (Huselid & Becker, 1998). First, HPWS are reflected in the HR strategy of the organization, including the extent to which human resource professionals participate in strategy formulation, and also the extent to which the HR strategy is aligned with the business strategy.

Second, HPWS enables voice and response mechanisms for employees to provide feedback. The active method of knowledge acquisition is accompanied by indirect and ongoing assessments of employee attitudes and motivation, including factors such as engagement and embeddedness, with the intention that organizations can gain the requisite knowledge to understand and influence their workforces.

Third, HPWS emphasizes ongoing growth of employees by exposing them to learning and development programming. Here, the emphasis is on linking learning and development programming to specific behavioral outcomes, often applying Kirkpatrick’s model of learning (1959) to assess impacts on performance and customer metrics.
Fourth, HPWS also emphasizes changes in motivation. Specifically, there is an emphasis on the equitable distribution of rewards, including pay-for-performance/skill/contribution and profit-sharing (Huselid & Becker, 1998). Such reward systems are premised on the utilization of performance management systems that enable clear lines-of-sight between employee behaviors and rewards, including promotion (Munyon, Jacobs, Carnes, & Bohle, 2016). In HPWS, performance management is also an ongoing, rather than episodic, process, and multiple assessments can be employed throughout the year to better gauge individual contributions (Ferris, Munyon, Basik, & Buckley, 2008). Assessments also provide both global and relative rankings of employees to index employee performance. Thus, even managers with high-performing units can have differentiation as these employees are ranked relative to one another. The employment of these approaches also avoids “forced distribution” systems that force managers to rate high-performing employees as lower-performing employees.

Finally, HPWS selection relies on intelligence, work sample, and skill-based assessments (Huselid & Becker, 1998). Here, organizations invest significantly both in understanding candidates’ individual differences and their fit with the job and the organization’s values. Multiple rounds of selection interviews are used, soft quotas can be employed to increase diversity, and significant effort is employed to find the right workers. Once the right employees have been identified, efforts are made to ensure that the company provides positive signals and negotiates in good faith.

To date, meta-analytic evidence reveals that HPWS are positively related to firm performance outcomes (e.g., Combs, Liu, Hall, & Ketchen, 2006), and benefit from the positive synergies of bundling (e.g., Subramony, 2009). Finally, the effects of HPWS are positive when accounting for country and cultural differences (e.g., Rabl, Jayasinghe, Gerhart & Kuhlmann, 2015).

In this period, three key trends shifted the thinking on HPO by the companies benchmarked in the research for this white paper:

1. Supply chain leaders pushed the shift from commitment to ownership-based organizational models. This included many organizations incorporating stock ownership and/or other ownership-based incentives in pay, culture, and reward systems for manufacturing and other supply chain employees (previously reserved for management roles).

2. The year 2000 marked the initial phase of thinking about how separate SC strategies could be integrated end-to-end, and in concert with HPO principles, to drive higher value. Total Productive Maintenance (TPM) and Lean supply chain strategies had often been implemented in isolation, and sometimes without fully integrating HPO and cultural considerations. This integration focus influenced additional HPO best practices. Examples of these best practices are included in Figure 3.

3. A shift in emphasis from 2000 to 2015 with the early part of this period characterized by HPOs driving productivity and loss elimination to support margin growth, while the latter half has been more focused on profitable growth and shorter operating cycles (product, innovation, planning, etc.).

Figure 3

<table>
<thead>
<tr>
<th>KEY ELEMENT</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Percent Employee Involvement</td>
<td>Detailed systems to verify that 100 percent of all full-time employees have personal action plans to deliver the supply chain/business goals. This is followed by systems to scorecard, action plan, and renew these goals/plans.</td>
</tr>
<tr>
<td>Power of Zero</td>
<td>Organizational system to train the teams and leaders to manage the system vs. zero mindset (defined by “anything the consumer is not willing to pay for = waste.” All gap analysis is performed vs. the zero vision (not gapping vs. “artificial” goals)</td>
</tr>
<tr>
<td>Everyone Operates and Maintains</td>
<td>The core work key element was redefined to expect 100 percent of the organization be trained and capable not only to operate (in core work) but complete ongoing maintenance. This expectation is based on TPM principles that 100 percent of the “eyes” of the supply chain must look for defects and be able to correct 95 percent of the defects.</td>
</tr>
</tbody>
</table>
Mega-Trends Impacting HPO

This research conducted for this white paper has identified four mega-trends that are impacting how leaders need to evolve their supply chain HPO best practices, including:

1. Generational Change
2. Digital World
3. Customer Revolution
4. Consumer “Personalization”

These trends are impacting the supply chain internally (different employee system needs inside the supply chain) and externally (consumer and customer changes impacting products and service expectations). After explaining the mega-trends and key implications, a review of the applied research (benchmark supply chain interviews) will reveal the specific changes needed for competitive advantage in 2025.

1. GENERATIONAL CHANGE

Generational differences are shaped by many factors including environment, education, technology, markets, trends, and world/local events. Comments about the differences in generations are broad in nature. Obviously, many people in groups of this nature behave in different ways, but supply chain leaders must assess generational shifts to focus their work on organizational improvement.

A major trend in the supply chain workplace is the replacement of the baby boomer generation. Within the next decade the youngest baby boomer will be 65 years old, which signals the end of this generation in the workplace (see Figure 4).

**Figure 4**

<table>
<thead>
<tr>
<th>GENERATION</th>
<th>BIRTH YEARS*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gen Z</td>
<td>1997 – current</td>
</tr>
<tr>
<td>Gen X</td>
<td>1965 – 1980</td>
</tr>
<tr>
<td>Baby Boomers</td>
<td>1946 – 1964</td>
</tr>
</tbody>
</table>
In general, baby boomers were reliable, hardworking employees. This generation was focused on hard work, structure, teamwork, commitment, and achieving more. The three HPO foundational principles mirrored their generational beliefs.

Along with these strengths, several weaknesses limited the organization. Baby boomers were groomed in organizations that rewarded competitiveness, and risk aversion and did not require deep technical mastery with the exception of a few specialized roles.

Example characteristics of the X, Y, and Z generations are shown in Figure 5.

![Figure 5](image)

**Example Characteristics of Current SC Employees Across Generations**

<table>
<thead>
<tr>
<th>GEN X</th>
<th>MILLENNIALS (GEN Y)</th>
<th>GEN Z</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seek work/family balance - “work to live”</td>
<td>Independent workers - less team oriented</td>
<td>Highest technically competent generation</td>
</tr>
<tr>
<td>Hesitant to speak out or create conflict</td>
<td>Strong ethic/social responsibility</td>
<td>Entrepreneurial - want to make a difference - global</td>
</tr>
<tr>
<td>Seek to work quickly - higher focus on personal time</td>
<td>Want to create own process (vs. be given one)</td>
<td>Multi-taskers (always on) - need multiple stimuli</td>
</tr>
<tr>
<td>Need flexibility at work and at home</td>
<td>Lower work ethic than baby boomers</td>
<td>Realism vs. idealism - can be cynical</td>
</tr>
<tr>
<td>Results focused, pragmatic, self-starting</td>
<td>Impatient with slow career growth (higher attrition risk)</td>
<td>Reliant on technology to solve problems, like change</td>
</tr>
</tbody>
</table>

Supply chain leaders are being forced to change approaches to proven work processes.

These generational characteristics have a direct impact on the benchmark HPO design and culture. Obvious questions include:

- How can the supply chain leverage Gen X’s strong results focus and self-starting abilities?
- How can the supply chain leverage Millennials’ strong ethical and social responsibility?
- How can the supply chain leverage Gen Z’s technical skills and expectations of a dynamic environment?

As a result of these generational changes, supply chain leaders are being forced to change approaches to proven work processes. Standardization is a great example. Baby boomers preferred structure and clear work processes. End-to-end supply chain strategies like simplification/standardization and platform management were
largely supported by this generation. However, the newer generations are skeptical of concepts like standardization since on the surface it appears to limit flexibility, process creation, and entrepreneurial behavior. The benchmark companies are selling the benefits of standardization to these new generations by focusing on the business benefit and the personal advantage to “standardize what we know – save our creative energy for the problems we have not solved.” This approach promotes the support for personal balance, solving problems, and flexibility.

In the “Best Practices” section below, examples highlight how the benchmark companies are evolving and changing their organizational practices to meet the business challenges of the next decade and leveraging the new skills/capabilities of generation X, Y, and Z. The section reviews examples of how benchmark companies are:

- Creating new organizational designs in flatter HPO-based organizations that provide for newer generations’ need for rapid advancement
- Leveraging the new generation’s thirst to solve problems, use technology, and create digital capabilities
- Developing systems and training designed for multi-taskers, technical savviness, and personal independence.

2. DIGITAL WORLD

Digital technologies are dramatically changing the business world and, therefore, supply chain work, changing the talents, skills, and systems in the supply chain, which directly impacts HPO best practices. Externally, the supply chain has been impacted by new systems for consumers and customers to order products and services, financial system access, etc. Internal to the supply chain, digitization has changed dramatically almost every operational work process. Manufacturing/operational units have shifted from motors, gears, wiring, shafts, chains, pumps, and programmable controllers to a new world of robots, servo motors, electronics, software/digital controllers, drones, cameras, and autonomous vehicles. This shift has forced a reinvention of:

- Hiring
- Training (virtual)
- Required skills
- Work processes (maintenance, center lines, inspection, security, data management, etc.)
- Quality control
- Safety systems
Virtually all manual tasks are being augmented by sensors or digital logging that integrate data, generate direction setting, and facilitate action planning.

Our GSCI business partners are sharing digital revolution examples, including:

- Plants moving from zero to hundreds of robots over a two-year period (enabled by significantly lower-cost robotics solutions)
- Warehouses using drones for inventory cycle counting
- Warehouses and transportation centers using drones for maintenance and safety inspections
- Organizations investing in massive training efforts to shift technical resources to managing digital systems
- Using virtual reality glasses in plant and warehousing operations to access videos/data to help with maintenance procedures, operational problem-solving, order picking and packing, and other training/resource needs. These tools provide the specific resources needed at the point of execution in the operation.

Virtually all manual tasks are being augmented by sensors or digital logging that integrate data, generate direction setting, and facilitate action planning (e.g., tagging equipment anomalies, maintenance logs, cleaning, inspecting, and lubrication logs, equipment centerlining, updating skill matrices).

3. CUSTOMER REVOLUTION

The customer landscape has also changed dramatically, increasing the complexity of supply chains in the 21st century. Trends related to the customer revolution include:

Increased internet sales and internet-based customers - Some people refer to this mega-shift as “Amazonification.” The dramatic increase in sales through non-brick-and-mortar/internet-based customers (both new customers and current retailers providing internet sales) is the biggest revolution in the customer landscape. This change has significantly increased supply chain complexity. Some of the many supply chain implications include:

- More single-product parcel shipments
- Single-product packaging requirements
- Increased sku complexity
- Demand for same day shipments
- Significant increase in corrugate for packaging and recycling programs

Consolidation of the number of customers, primarily in the brick-and-mortar retail customers - An example is the significant acquisitions in the pharmacy and prescription drugstore channel moving the customer landscape from ~10 midsized retailers to two or three large customers. This shifted power
from the manufacturers to the customer (retailer), including co-creation strategies where customers design customized products or services with the primary manufacturer.

**Expansion of brick-and-mortar club channel** - The one element of the brick-and-mortar customer landscape that is expanding is the club channel. This increases the number of packaging requirements for skus. Now, the “power” skus need to be offered in pallet-friendly packaging.

**Consolidation of food and mass-discount retailers** - Wal-Mart, Target, Kroger, and other retailers have shifted to offer both food and merchandise skus, representing a one-stop shopping experience for consumers. This shifted the power from the supply chains to fewer, bigger customers.

**New retail outlets (Alternate outlets)** - New retail outlets are invented every month. The percent of sales through airport malls, boutiques, non-duty free shops, high-end vending machines, and other new outlets to make product available for purchase where the consumer is present. This change increases supply chain complexity through increased (different) packaging requirements, new security packaging, and labeling complexity (language).

Overall the customer revolution has exponentially increased supply chain complexity, expectations of service/quality, pressure on manufacturer margins, and expectations for overall customer value creation. The increased pace of initiatives, shorter lead-time, vendor replenishment of customer store inventory, ownership of in-store obsolescence, and digital fluency (linking supplier data systems with customers) are driving new supply chain solutions.

4. CONSUMER “PERSONALIZATION”

The rise in consumers’ demand for more personalized products is directly linked to two of the first three mega-trends: post-baby boomers and customer revolution.

New generations (see above) seek more personalized products. This trend, coupled with internet-based and alternate customer outlets promotes ordering exactly what the consumer wants/needs. Shipments are normally in “eaches” through parcel post systems. A visible example of this trend is Coca-Cola offering its beverages with people’s names on the can/bottles. This change drives the supply chain from one sku to 100s of skus for the same product (finished product and material inventory requirements, manufacturing, shipment requirements for each sku).

Home-delivery supply systems for individual consumer needs are rapidly increasing. It is no longer necessary to leave your home to buy electronics, clothing, consumer products, and groceries. Again, these deliveries are personalized for the consumer in “eaches.” Most traditional retailers are demanding that their vendors provide such services to enable them to compete with online retailers like Amazon and deal with these consumer needs.
There is simply

NO TIME to do work the way it has been done. There is NO TIME to train people in new skillsets in classrooms. There is NO TIME to “bake” equipment or product ideas for two to three years before hitting the market.

MEGA-TREND SUMMARY

Generational shifts, digitalization, customer revolution, and consumer personalization have significantly changed the supply chain culture and business requirements. Beyond witnessing an increased magnitude of change, we also see change occur at an increasing speed. Indeed, some might argue that there are not four mega-trends, but one over-arching mega-trend called “speed”.

There is simply NO TIME to do work the way it has been done. There is NO TIME to train people in new skillsets in classrooms. There is NO TIME to “bake” equipment or product ideas for two to three years before hitting the market. There is NO TIME for sequential planning. It all has to happen in real time, via virtual networks of employees across the entire value chain from suppliers through vendors through 3PLs through customers.

The cycles of work, action planning, continuous improvement, and innovation is being collapsed exponentially. The winning companies are those that can create high performance organizations that can thrive in the “new speed of business.”

Crowd-sourced delivery service such as that provided by Postmates, Doordash, and Grubhub, as well as large retailers like Walmart and Aldi, is another supply capability being implemented. The point of transaction between the manufacturer and the consumer is critical to building a long-term, strategic, brand-based relationship. Historically, supply chains have staffed experienced, top talent in these roles to make this transaction point “moment of truth” special. Crowd-sourcing significantly changes this transaction and the skill sets required to deliver value.
Best Practices

Introduction
In developing this HPO best practices summary, we conducted 19 field interviews with 14 benchmark companies. These companies spanned beverage, equipment, technology, automotive, chemical, food, and CPG companies.

While many GSCI members have North American roles, we found that when discussing HPO, most companies shared best practices developed from their global operations. Because of different business models and industries and different stages of maturity, benchmark company work in this area was broad. Over 250 best practices were collected, which we grouped into 10 broad themes (see textbox).

The findings are startling. Not only have new best practices evolved, but also some of the best practices of the previous decades have been redefined.

Half of the best practices themes fell under an “Established HPO Principles” heading. These were well-established HPO principles but dealt with how they were being applied in light of current market, technology, and workforce dynamics. The other half fell under a “New to the World” heading and represented what we saw as significant shifts in how companies were approaching some challenges to both traditional as well as established HPO organizations.

<table>
<thead>
<tr>
<th>BEST PRACTICES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Established HPO Principles</strong></td>
</tr>
<tr>
<td>1. Zero-Loss Mindset</td>
</tr>
<tr>
<td>2. 100 Percent Employee Engagement</td>
</tr>
<tr>
<td>3. High Performance Leadership</td>
</tr>
<tr>
<td>4. Business Value Creation</td>
</tr>
<tr>
<td>5. Accelerating People Development</td>
</tr>
</tbody>
</table>
Established HPO Principles

The following five best practices reflect well-established HPO principles but express how they are being applied in light of current market, technology, and workforce dynamics.

1. ZERO-LOSS MINDSET

A zero-loss mindset challenges the status quo and fuels a commitment to continuous improvement. Heavily influenced by Lean principles developed in the ‘80s mindset and ‘90s, a zero-loss mindset recognizes that more than 95 percent of activities do not add value to the final consumable service or product. Much waste is driven by lack of standard work processes, weak change management foundations, and non-value added, self-induced volatility. HPOs address this by fully engaging employees and partners at every level in simplifying, standardizing, and continuously improving how they do their work. Benchmark companies noted how this continuous improvement culture was advanced by a strong external orientation, pursuit of systematic benchmarking, and adoption and expansion of Lean principles at all levels.

Best-in-class companies are also using advances in technology and innovation to challenge current sequential work processes, organizational designs, and manual tasks. Exposing all employees to these technology innovation trends opens their eyes to new possibilities and ways to eliminate non-value added work.

Clear leadership in deployment of loss elimination goals promotes defect elimination and results in coordinated, disciplined work on loss identification, and tracking. The simpler, more effective the business strategy and framework is, the better the organization can focus on needed performance and leverage
A zero-defect mindset should be seen as a value-creation tool, not simply a cost-cutting tool.

Zero-defect principles to achieve key results through a well-developed master plan. Many benchmark companies have annual loss analysis processes, which cascade into shorter continuous improvement cycles. Including suppliers and customers in this process is critical, as up to 60 percent of the losses discussed occurred between functional and organizational silos. A zero-defect mindset should be seen as a value-creation tool, not simply a cost-cutting tool.

In addition to rigorous internal and external benchmarking, some companies are adjusting their longstanding practice of hiring only at the entry, or extremely senior, levels. By also bringing in some external hires at other levels and valuing the perspective of new employees, they are finding it easier to encourage “clean sheet” or zero-loss mindsets. New, external managers bring with them insights from other organizations and also may be better able to ascertain areas of improvement than insiders.

EXAMPLE: Common Lean Principles for Zero-Defect Mindset

- Specify the value desired by the customer
- Identify the value stream for each product and challenge all of the steps currently needed (generally nine out of ten are not value added)
- Make the product flow continuously through the remaining value-added steps
- Introduce pull between all steps where continuous flow is possible
- Manage toward perfection so that the number of steps and time continually falls
2. 100 PERCENT EMPLOYEE ENGAGEMENT

Well-defined business objectives, clear HPO principles, and continuous training and development allow employees in HPOs to feel in control of their own destiny. A 100 percent engaged organization begins with employees who can connect their personal success with that of the company. This creates a workplace where individually and collectively employees make meaningful individual and collective commitments - first to each other, and then to those with whom they work, live, and serve.

Communication and messaging are extremely critical to engaging and empowering the workforce. The company must be very intentional in how it communicates across functions and with employees at all levels. This includes town hall-type settings, prioritizing one-to-one discussions, and leveraging digital platforms. In fact, weak systems and information sharing can be interpreted as “management hiding information” from today’s employees, who are used to having information and connectivity at their fingertips outside of work.

Equally important is for leadership to make it easy for employees to express themselves and have a voice. Whether it is tackling the toughest business challenges, continuous improvement ideas in the workplace, or opportunities to improve inclusion, providing employees a safe and easy way to participate is central to HPOs. Solutions range from department meetings, one-to-one meetings with management, pulse surveys (either onsite or online), and town hall forums promoting proactive communication exchanges. Indeed, leading companies proactively leverage their messaging, but also leverage employee and consumer feedback to continuously improve.

A flat organization, with minimum levels and layers, has long been a critical HPO principle. Pushing decision-making lower in the organization, in line with where capability resides, has resulted in faster decision-making, more agility to respond to dynamic market requirements, and employee fulfillment. Leadership behavior drives this empowerment – whether encouraging their people to make the call whenever possible or creating a safe “learning culture.” Flat structures also necessitate a workforce capable of producing autonomously, implying a need for employees comfortable with ambiguity.

Many benchmark companies are sponsoring more multifunctional problem-solving teams to engage all levels and diverse perspectives to solve the toughest company-identified problems. These problem-solving teams have well-defined objectives, are given time and resources to progress toward their challenges and present their recommendations to senior management for adoption and implementation. There is an expectation that team members not only bring their
technical mastery and strengths to the team, but also build new skills and gain an appreciation of other regions, cultures, and functions.

Best practices also suggest that openly discussing business realities, including tough topics such as automation replacing manual tasks or company restructuring, is key to maintaining employee trust and engagement. Ensuring that all employees have visibility to these challenges gives them a chance to grow new hard and soft skills that are key to remaining as competitive as possible in a dynamic work environment.

**EXAMPLE: Smart Pilots**

Several companies attributed their success in HPO adoption to picking the right pilot operations department or site, the right leadership, and the right compelling business need. “Smart Pilots” is the process of selecting a small part of the organization to test improvement concepts/ideas. Selecting a small section of the organization to learn if an idea is effective and if the learning is transferrable (smart pilots = ability to learn and reapply from pilot). The success of this pilot, in turn, created internal excitement and momentum for the HPO approach.

Addressing poor safety performance was often cited as the first area of HPO focus, which fostered natural engagement across all departments and levels in the organization. The safety focus was also aspirational and provided the organization with a higher-order purpose for their work – something highly valued by all employees, but especially younger generations who are seeking purposeful work.

It was a natural area to establish principle-based behaviors, challenge employees to embrace new standards and technologies, reinforce team and personal accountability for results, and adopt an agile mindset to spot and anticipate new risks in light of changes in technology, workforce, and market needs. The breakthrough results of this HPO approach were then expanded to address other business and employee needs.
3. HIGH PERFORMANCE LEADERSHIP

While some leaders are naturally talented at building and leading an HPO organization, many are not. Investing to imbue leaders with the needed soft skills to nurture and fully leverage HPO to deliver business value creation is imperative. Once the company establishes that HPO creation and leadership is a business imperative and is an important part of every leaders’ performance and reward system, HPO leadership needs to be part of all leadership training and development, including mentors/coaches being assigned to leaders to reinforce the needed leadership skills and behaviors.

HPO is often a significant change to previous management practices – practices that the entire organization has mastered and become comfortable with. Investing in leadership training in HPO is a prerequisite to harvesting its benefits. Whether HPO is championed at the business leadership team level, supply chain leadership team level, or operations site leadership level, truly understanding HPO and the impact of leadership in implementing and championing it requires time and experiential, learning. In becoming true champions for HPO, leaders must not only learn new behaviors conducive to it, but also unlearn traditional leadership behaviors that may reduce total employee engagement, inclusion, and empowerment.

Leadership adaptability, emotional intelligence (EQ), and political skill are critical drivers of employee engagement. The marked differences between generational styles and the importance of managing a more diverse and inclusive workforce highlight the importance of being able to establish effective manager-employee relationships. Being able to connect with employees as individuals and understand what motivates them, regardless of gender, generation, orientation, or ethnicity requires leadership focus and awareness. The quality and frequency of manager-subordinate conversations and one-on-ones is critical to enabling employee success. Effective leadership depends on investments made to understand and manage each employee as an individual.

Leadership openly discussing mistakes and resulting learnings is essential to encouraging smart risk-taking and agility. Astute managers recognize the value of enabling employee performance by providing needed resources. Just asking employees if they have what they need to accomplish a task or project can empower employees to come up with solutions or identify barriers only the manager can address. Finally and most importantly, effective leaders link these activities toward the hard business results and deliverables expected of the employee. This accountability serves to focus them in dynamic environments that can sometimes be overwhelming.
Constancy of purpose and leadership’s unwavering commitment to HPO principles was cited as critical in our study of participating organizations. This requires leadership to articulate higher-order principles and strategies and then display courageous leadership to stay the course toward those objectives. An energizing vision and passion then beget intentional plans and execution systems that enable the organization to transition its strategic leader priorities to operational and tactical activities that create value. Transitioning to HPO takes the right organization structure, well-defined implementation plans, both hard and soft HPO metrics, and strong leadership.

HPOs need not only in-depth leadership understanding on how to change cultures but also a deep personal commitment by all leaders to become more externally focused, more self-aware, and committed to achieving best-in-class performance. The following leadership behaviors were cited by benchmark companies as pivotal to leveraging HPO.

- Demonstrating digital fluency though use of new collaboration platforms
- Role modeling how to engage a more diverse work force
- Supporting the need for standards and operational excellence
- Simultaneously pursuing innovation for disruptive breakthroughs

**EXAMPLE: Role of Leadership**

The role of leadership cannot be overstated in adopting HPO. At a global food manufacturer’s plant, leadership was assigned to each of the 50 production line teams implementing Cleaning, Inspection, Lubricating (CIL is a total productive maintenance [TPM] technique). Nothing took priority over this activity. This role modeling coupled with significant improvements in reliability and the resulting improvements to employee morale signaled to the organization that the HPO and six sigma journey was not a passing fad. This role modeling by the site leadership and their willingness to take risks to foster learning also accelerated lower levels of management to become more aware of how traditional management behaviors needed to change. Leadership truly had to be shared across the entire organization to foster increased ownership and accountability at the lowest levels of the organization.
4. BUSINESS VALUE CREATION

Many people are resistant to change. Making a compelling case for that change is a prerequisite to adoption of new HPO culture, connecting individual ambitions to the changes, and instilling an urgency to close competitive disadvantages. This is the role of leadership. It calls for leaders who have a deep, pragmatic understanding of HPO and employee engagement.

Strong business acumen and a business-results orientation are critical enablers of value creation and not just loss elimination. Building this business acumen throughout the organization is vital to reinforcing the business purpose, tying the need for continuous change and improvements to market dynamics, and helping to overcome functional or organizational resistance to change. Ongoing employee development enables all levels of the organization to focus on business basics, including key performance measures, important competitive challenges, benchmarking data, and connection to department and functional deliverables. When this includes making customer service or consumer-share KPIs more visible and real time, employees feel more engaged.

This was also cited by companies as important to connecting daily tasks to the higher-order business need of profitable growth. When these external business objectives are well understood, the pace of change hitting supply chain operations was less threatening and reinforced even more the adoption of agility, speed, and entrepreneurial behaviors by all. These deliberate efforts to grow business acumen and visibility of business results are essential to helping the shop floor “think like management.”

Of course, this pace of change and quality of results delivery is a direct function of the quality and rigor of the business target-setting and deployment process. Benchmark companies noted that there is both an art and science of target-setting, deployment, engagement, and operationalizing. Maintaining the focus on bottom-line results and external competitiveness helps ensure the organization does not get distracted, rationalizing how work is currently achieved.

Data-driven decision-making is an important part of the company culture, and data are considered company property to be shared on a discretionary basis. This culture of data-driven decision-making is well established and is seen as empowering employees and delivering sustained results.
Once the sustained benefits of HPO have been demonstrated, expansion of HPO beyond manufacturing or distribution center walls is something many benchmark companies are pursuing aggressively. This is difficult to execute, in part because the employees who have been immersed in the HPO culture are largely limited to existing operations sites. This situation often occurs because the need for operational excellence, teamwork, and defect elimination is easier to measure in an operations environment with relatively shorter time horizons and clearer cause-and-effect relationships. Still, with the need for topline growth and adoption of Lean Innovation to accelerate change, now a clear business imperative, the foundations of HPO and 100 percent employee engagement and empowerment are needed across all functions and settings.

**EXAMPLES: Purpose-Driven HPO**

1. Connecting business objectives and value creation to higher-order personal or company purpose is a principal enabler for motivating and engaging the workforce. This was often cited as highly important to tomorrow’s workforce. Whether this is the company’s sustainability commitment, diversity and inclusion efforts, or advancement of technology and services to better serve others, HPO organizations thrive when employees can connect the company mission or purpose and values to a higher-order, aspirational purpose. Often, just providing an HPO environment that is committed to 100 percent employee engagement and empowerment is a tangible differentiator for companies to successfully recruit, develop, and retain high-performing employees.

2. Benchmarking performance, such as profit per FTE, impels continuous improvement and pushes high employee engagement. A regional food company is focused on the profit per FTE. Finding ways to work more effectively, drive bottom-line results, and eliminate bureaucracy and waste is spurred by this continuous external benchmarking – across all industries.
Innovative approaches to training and development are supporting this need for personalized training, available on demand.

5. ACCELERATING PEOPLE DEVELOPMENT

Sustaining exceptional performance necessitates a workforce that can adapt to changes in market requirements and rapid advances in technology. Best-in-class HPOs direct significant effort and resources toward not only attracting and training the best employees, but also toward continuing to grow and develop them. The pace of market and business change requires an equal pace of investment in the organization’s and individual’s capabilities. The speed of technology development and the opportunities for artificial intelligence (AI) and low-cost robotics to eliminate manual tasks and decision-making are coming at breakneck speed. What used to be true often no longer is due to the speed of change. So this training, retraining, and upskilling span the breadth of the workforce.

Outstanding people-development systems characterized by a high level of employee ownership, are therefore seen as a competitive advantage by best-in-class HPOs. These companies use robust skills matrices to plan and track progress against business- and employee-driven skill development. When this approach is data-driven, tracked, and rewarded, it encourages faster development of talent, addresses performance opportunities in an objective, fair fashion, and empowers the employee to pursue personal development. These companies believe that continuous learning, spanning one’s entire career, is crucial for personal and company success.

Innovative approaches to training and development are supporting this need for personalized training, available on demand. How knowledge is collected, stored, and shared is changing. Previous “tribal knowledge” sharing approaches are being replaced by digital knowledge-sharing. Increasingly, existing experience and operating policies contained in training manuals are being digitized and fed into AI. Furthermore, informal methods of training are changing. For example, previous training conducted by word of mouth or years of hands-on experience gained through narrowly defined roles is being replaced by digital, personalized self-training and qualification. Through digital training, employees can access training when they want it, 24/7. Use of Virtual Reality (VR) and remote sensors enable employees to problem-solve and gain exposure to a broader range of experiences more quickly and in team-based settings. Leading companies are also estimating the return on investment from learning initiatives and holding providers accountable for employee learning and success.

Multi-skilling has always been important to HPO self-directed teams and employee engagement. No longer can employees’ competencies just be measured at a technical or process level, often described as their intellectual competencies (IQ). Instead, organizations also are measuring and encouraging
development in emotional competencies (EQ), social competencies (SQ), and digital competencies (DQ). Further, all of these are enabled by a strong business acumen, or business intelligence (BQ). Having these defined and tracked by the employees and managers not only directs training activities, but also empowers employees to pursue personal development.

Digital technology is also facilitating breakthrough performance despite turnover in the workforce and an increasingly dynamic market. Indeed, upskilling and reskilling the existing workforce is critical to balance adoption of new technology while still retaining decades of priceless operational experience. Cognitive technology is elevating the supply chain workforce to a higher level by allowing individuals to have a broader view of the supply chain and enabling higher value tasks. This technology empowers faster integration and start-up of new employees and equips them with the latest market and customer intelligence. Many companies described this as a race to transition the worker experience into machine learning platforms before employees either leave or are lost to retirement.

**EXAMPLE: Use of Digital, Verified, Transferable Training and New Manager Training**

1. Digital Training and Digital Credentialing – The workforce of the future wants to develop transferable, verified skills beyond their current job, and potentially beyond just their current employer. Digital credentialing or digital badges provide evidence-based validation of skill qualification. They also provide a granular record of achievement that can be shared via social media or shared in digital resumes. Ultimately, this allows individuals to build a brand and earn eminence in the marketplace.

2. New Manager Training – All new managers in the supply chain go through a three-year rotational program in different parts of the supply chain organization and in at least two geographical locations. Leadership programs are tailored for four target audiences: front-line leadership, emerging leadership, strategic leadership, and executive leadership.

3. Training Accountability – Training leaders are being held accountable for the delivery and outcomes of their programs. Organizations are also estimating the return on investment from training by linking programs to employee productivity, retention, and customer metrics.
New to the World HPO

The following five best practices represent what we see as significant shifts in how companies are approaching some challenges to both traditional as well as established HPO organizations.

1. THRIVING ON SPEED

Much is made of the many challenges of the VUCA (volatile, uncertain, complex, ambiguous) world with the speed of change being seen as a negative. Yet, benchmark companies have found that this need for speed is a compelling business driver: It is extremely effective in engaging their workforces and accelerating their HPO journeys. Without adoption of HPO elements such as 100 percent engagement, zero-defect mindset, external orientation, effective teamwork, continuous development, and employee empowerment, companies simply cannot keep up.

Continuous learning and fast learning cycles speed transitions to HPO. Learnings from the operations floor go back up through the TPM pillar structure. Within plants and distribution centers, HPO learnings, both successes and setbacks, are being discussed actively as part of virtually every meeting. Similar to how safety moments or quality moments are seen as significant discussions about how to prevent risks and address outages, HPO moments are now occurring before each meeting. These HPO moments serve to highlight just in time the behaviors and situational leadership that can be applied to accelerate the HPO journey and ensure 100 percent employee engagement and empowerment.

The speed of change and explosion of information also are impacting how leadership is communicating and staying in touch with its employees. Flatter organizations and accelerating pace of change requires leadership to share business direction and context with employees in a way that allows teams to be more self-directed and that empowers decision-making to occur at every level in the organization.

Embracing speed as a competitive advantage is a powerful incentive to eliminate non-value added work, standardize repeatable tasks to reduce self-induced variation, and accelerate adoption of Lean Innovation principles, which is discussed separately.
2. PROJECT- VS. ROLE-ORIENTED CAREER PROGRESSION

In many leading HPOs, work is being organized around specific objectives or projects rather than traditional functional, role-based work. Because of the increasing pace of innovation, it is becoming more important to bring diverse empowered teams together to quickly mobilize and implement solutions in fast “sprint cycles.” This change is resulting in individuals identifying themselves more with their project responsibilities vs. a defined role. While they still retain a “functional” home, they are focused on business objectives first, and functional rewards or priorities second. This has an added benefit in engaging and retaining younger employees, who tend to value fast-paced change, team membership, and progressing through a series of responsibilities instead of just accumulating tenure in a series of predetermined roles.

This development has prompted benchmark companies to revisit traditional reward systems and personal progression. They are moving away from vertical advancement up a hierarchical organization to achievements within a flatter and more flexible organization. For these companies, a rewarding career is not about employees waiting their turn – it’s about them realizing their short-term and long-term goals. This requires management to focus on target- and project-setting on a more frequent basis and on empowering employees to

EXAMPLE: Speed via Integrated Change

Integrating HPO into other planned changes (whether technology changes, process changes, organizational restructures, acquisitions and mergers, etc.) enables faster adoption, given an openness to new approaches and resources to manage the change. A global food manufacturer leveraged a bold global supply chain transformation (see case study below) to drive change in both hardware (supply chain footprint, manufacturing technology, IT systems) and “software” (HPO best practices, leadership changes). Making the most of technology innovation such as high speed “lines of the future” to support productivity improvements helped fund the supply network footprint redesign and the reserves required to transform the organization’s productivity and capabilities.
It is critical for management to keep a well-stocked pipeline of specific challenging projects that their employees and teams can complete in bite-sized chunks.

Achieving their business objectives. When employees gain recognition for their achievements, both intrinsically and materially, they tend to see a workplace where they have more growth potential and not just a pyramid structure of advancement. A key part of the reward system is for employees to be given increased challenges and more influence over what types of projects they can pursue.

Restructuring rewards systems in this way requires leadership to become comfortable with a progression system different from what they experienced working their way up the ladder. It also requires new leadership skills and behaviors. For instance, it is critical for management to keep a well-stocked pipeline of specific challenging projects that their employees and teams can complete in bite-sized chunks. This adjustment also requires management to shorten the time horizon and increase the frequency of work plan discussions. By regularly discussing challenges, skill development, and interests, managers and subordinates can plan a series of projects, often with overlapping lifespans, that keep the employee highly engaged and motivated. Employees are seen as completing a pipeline of projects vs. being stuck in a role for a fixed duration.

Benchmark companies highlighted that this change is also helping address turnover issues, as this approach resonates perfectly with recent hires who are seeking challenges and feedback in a fast cycle.

There are numerous benefits to this emerging approach, in addition to making work more interesting for employees. The time horizon for work planning is naturally shortening, given the accelerating speed of external changes. But this approach also helps with internal changes, such as organization and company restructuring, or mergers and acquisitions, which make it difficult for employees to see their career path clearly when it is defined by a series of structured role progressions.

In tenure-based, sequential role progression systems, flatter HPO organizations can disincentivize employees who see fewer levels to be promoted through. In a more project- and responsibility-based progression system, employees see that they are being rewarded for their contributions and expanding responsibilities. Finally, the crucial HPO elements of multiskilling and “flow to the work” are bolstered with this approach.

A merit-based advancement system, with an emphasis on project delivery, and less on tenure- and role-driven skill acquisition, is seen by benchmark companies as empowering employees and engaging them more effectively to solve pressing business challenges.
A merit-based advancement system, with an emphasis on project delivery, and less on tenure- and role-driven skill acquisition, is seen by benchmark companies as empowering employees and engaging them more effectively to solve pressing business challenges.

**EXAMPLE: Building Future Operations Leaders**

The population of people who have a deep understanding of operations is retiring faster than the pipeline of new hires is able to provide sufficient experience and leadership to replace it. Even with low-cost automation and AI, there is an ongoing need to develop operations leaders who have the essential leadership, interpersonal, technical, and zero-defect skills required in this function. As a result, reward and progression systems are being redesigned to enable the development of this experience within the supply chain. An effective HPO leader who can engage the staff and empower them fully can be particularly impactful in an operations environment where results are visible and accountability is key. Operations roles also train employees on the value of creating and enforcing standards, eliminating variation, and leveraging continuous improvement processes. All of these skills are critical in fostering an HPO environment of 100 percent engagement and a zero-loss mindset.
3. EMBRACING GENERATIONAL DIFFERENCES

Like other forms of diversity, generational diversity in the workforce, if fully leveraged, can be an important enabler for HPO. How the millennial generation (Gen Y) approaches work can often be different from Gen X, or baby boomers. This can present a challenge in how different generations communicate, how leaders coach and motivate other generations, and most critically, how all employees are fully engaged and empowered to contribute to their fullest. Rather than view these differences as a problem, benchmark companies are embracing generational diversity to accelerate their performance.

Long-tenured employees often have greater mastery, organizational, and leadership skills than less-tenured employees, but can sometimes struggle with the increasing pace of change and may lack digital skills to leverage technology to its fullest. On the other hand, the less-tenured employees may have these digital skills and desire for continuous challenge and growth, but often lack the big picture and strategic thinking that is often present in more-tenured employees. Consciously building teams that have this tenure diversity, establishing the expectation that employees share their unique perspectives with colleagues, and even creating two-way mentoring relationships help ensure the best of both worlds. Few tenured employees seek to become obsolete, and most new hires want to benefit from the lessons learned by their predecessors.

The breadth and diversity of these generational differences also call for tailored management approaches and a range of processes/tools to address diverse employee needs and capabilities. Generational diversity must be factored into change management, training, and performance behavior systems. No longer are approaches one-size-fits-all and pushed across the organization. Instead, work processes and organizational designs incorporate more flexibility and are pulled by the organization to enable peak performance across the workforce. Empowering employees to play an active role in their development, work, and project planning and process and organization design improvements are all examples of this “pull” approach.

Many benchmark companies are marketing their HPO culture and design actively to attract and retain the workforce of the future. Employee engagement, team-based work, continuous development, embracing change, leveraging digital, smart risk-taking, flow to the work, purpose-driven work – are typically highly attractive work attributes to the millennial generation. Fewer layers and flatter organizations also empower them, provide opportunities to continue to learn, and afford easier access to senior management. In some ways, HPO may be almost intuitive for this generation, and thus HPO is an important weapon in winning the war for talent.
EXAMPLE: Leveraging Multi-Generational Mentorship

Reverse mentoring and two-way mentoring have an important role to play in embracing generational diversity. Employees are encouraged to develop their own mentor-mentee relationships and shadow other employees who can assist them in their work, their development, or their career planning. This is often driven by a natural symbiotic relationship – for example, a more experienced employee may seek out the younger manager’s ease with the latest technology while offering the younger employee useful experience and context in return. These personal relationships often lead to improved understanding and bridging between generations and an increasingly diverse workforce. Such relationships can also provide a safe setting for employees to share ideas and bounce ideas off each other. It may seem like common sense, but the benefits of overt leadership support for these two-way mentorship relationships is critical to building the networks needed to enable an HPO.

4. HPO VIRTUAL NETWORKS

The concept of “team” is being redefined in a world where all aspects of work, from market trends to workforce composition to technology, seem to be changing at an increasing rate. Gone are the days when a team had several years to gel and become high performing. Teams today are fluid and may never have met in person. Of course, this new structure emphasizes the importance of many team-building best practices that are sometimes overlooked.

- Well-defined, common objectives and performance metrics
- Clear roles and responsibilities within the team
- Appropriate and inclusive team charter
- Clear communications lines and team checkpoints.

But these are also being supplemented by use of digital team apps and platforms; digitally enabled onboarding and qualification processes; and digital master planning and task tracking. Dispersed networks of employees are being bolstered by the latest digital technologies and application of well-established team effectiveness principles.

Benchmark companies emphasize the use of virtual networks to connect and engage individuals with their teams, teams across an entire site, and sites with the larger enterprise, which often consists of external customers and suppliers.
Companies are also using in-house virtual community platforms to connect communities of people who may not even be on the same team but have shared passions. These digital platforms (OnSemble, Mindspark, NiceJob, Honey, VeryConnect, etc.) enable posting of articles, faster sharing of new ideas, creative expansion of best practices, social connections, and opportunities to contribute beyond local boundaries. This is extremely popular with Gen X and Y employees and matches their digitally connected world outside of work. It is a very organic approach, usually requiring minimal management oversight or governance. This freedom encourages them to tackle tough challenges and assume responsibility for self-growth and development. Company-sponsored platforms allow employees to feel more connected, more challenged, and more fulfilled.

**Use of virtual networks**
allows employees with selected digital skills and passions to connect online and accelerate adoption of latest analytics and technology to solve pressing business challenges.

These virtual networks are also supported in most of the emerging Manufacturing 4.0 platforms. They support all critical manufacturing pillars (AM, PM, FI, safety, quality, etc.) – facilitating defect-tagging, root-causing, action plan development, and tracking and reporting – all in one integrated database. Team members can communicate with each other and other sites and functions 24/7 and seek help troubleshooting from others. These digital platforms also allow integration of change management, skill matrix progression, and safety qualifications, all in real time.

Use of virtual networks allows employees with selected digital skills and passions to connect online and accelerate adoption of latest analytics and technology to solve pressing business challenges. This creates a positive vibe regarding the supply chain organization and operational roles. Use of these networks also reduces the stressful constraints traditionally faced by employees, including traffic commutes, travel demands, and childcare arrangements. Thus, they make the supply chain organization more attractive to employees.
EXAMPLE: HPO in a Crowd-Sourced Networked World

The gig economy and increased quality and accessibility of crowd-sourced workers are challenging some long-held HPO principles/beliefs. With crowd-sourced contracted work, there is less need for the contracted workers to be aligned with the company purpose. Instead, the worker need only understand the purpose and task at hand. There also is less emphasis on training and development, long-term relationships, and multiskilling. What is enabling this type of work is the new generation of self-starting, self-sufficient workers, who are happy focusing on their niche of the activity system. Many of these workers seek independence and autonomy from traditional governance systems, and view the gig economy, or contracted work, as a vehicle toward that end.

This shift is also being fostered by more common crowd-sourcing best practices and platforms, which create a safe plug-and-play functionality between service providers and enterprises. With these digital platforms and virtual networks, it is becoming easier to outsource more work. The new generation’s speed in picking up where another provider left off and their agility in learning are impressive. Here, however, companies must weigh the benefits and cost-efficiencies of outsourced contract work against the magnified risks, reduced commitment, and data sensitivity tradeoffs of employing such workers.

5. SUPPLY CHAIN LEAD INNOVATION

The need for faster, more agile innovation across all parts of the company, including all types of operations, is enabled by adoption of Lean Innovation principles. This includes the concept of rechartering, which essentially creates startups within organizations to solve the most challenging problems. These Lean Innovation teams are free to not only operate differently from established norms, but also to establish a “clean sheet” approach to challenges – to start over from scratch. This not only encourages the freedom to innovative, but also allows the new startup to benefit from some of the resources and scale benefits in the parent company. HPO principles of zero loss are embraced via Lean practices, and 100 percent employee engagement and empowerment are essential as well.
A new type of leadership is needed to support HPO and the Lean Innovation approach essential to keep pace with a dynamic market, workforce, and technology landscape. Many see Lean Innovation as appropriate only in new product development or new business model development. But in the benchmark companies, the Lean Innovation principles are playing a key role in operations such as manufacturing and distribution. Fast prototyping of Kaizens, smaller teams of multiskilled, autonomous decision-makers, use of best-in-class solutions from different applications, diverse team membership, use of virtual design tools – all of these are improving the speed with which challenges are being solved within operations settings.

A new type of leadership is needed to support HPO and the Lean Innovation approach essential to keep pace with a dynamic market, workforce, and technology landscape. From rules-based to principles-based, from knowing leader to learning leader, leadership behaviors must change to foster a learning environment to identify innovative approaches that lead to breakthrough results. Leadership’s role is to facilitate the conditions that will stimulate the entrepreneurship and experimentation needed to meet changing market needs. For certain areas, they must maintain their fiduciary and governance roles (safe, legal, ethical), but for others they should be encouraged to adopt a willingness to learn and manage risk on a sliding scale. By focusing their energy in establishing the vision and supporting the teams’ needs to achieve it, leaders are tapping into a broader pool of diverse, highly energized resources who will solve difficult issues and deliver superior solutions more quickly than a traditionally led organization.

**EXAMPLE: Continuous Improvement to Lean Innovation**

Just as Continuous Improvement played a critical role in the productivity and cost-reduction drives in the last 30 years, Lean Innovation is facilitating speed and growth in all facets of the business and the supply chain. Applying Lean Innovation is a way to bring entrepreneurial spirit and rapid learning to areas such as manufacturing and distribution. It requires leadership support to ensure teams working on innovation have scarce, but secure, resources; independent development authority within the few, truly critical, boundaries; and a personal stake in the outcome. Innovation also demands some unstructured time for employees to innovate in their area or contribute to innovation in areas that may not be part of their current role but are of high interest to them. Encouraging these types of exchanges from fresh eyes and giving employees some latitude to fail small while trying new approaches will enable organizations to increase their pace of innovation. This is a new culture, and it calls for different behaviors across the breadth of the organization.
Case Study

A large global consumer food company faced significant business changes and challenges that kept them from growing over the last decade. To foster greater focus on global brands and accelerate growth opportunities, the company split, which established a more focused consumer product offering. In forming this new global company, it was apparent immediately that, to avoid potential business threats and generate cash for investment in growth, several transformation initiatives were necessary:

Greater focus on cost control (e.g., in key spend areas such as travel, contractors and consultants, and car fleet), organization structural redesign, and transformation of supply chain were chosen as the critical focus areas.

The first steps in transforming the supply chain included:

- Plant streamlining or closures
- Elimination of old, non-standard equipment and specifications – standardized product and platform design through menu cards
- Reduction of excess inventory on hand
- Elimination of product waste, product defects, and consumer complaints
- Improved relationships with organized labor and reduction/elimination of part-time/seasonal workforce
- Improved equipment reliability, operation efficiency, and installation of platform-advantaged assets
- Improved operator process knowledge, ownership and accountability, and improved operator skill mastery/qualification

Consistent with the above best practices on HPO leadership, the food company realized leadership was important for advancing these transformations. The following illustrates the high performance leaderships’ best practices that reflect those in the “Best Practices” section above.

Leadership first prepared and secured approval for the business case, a capital reserve was established to fund a five-year transformation journey, and clear guidelines of what constituted transformation were aligned on what could be charged against the reserve. This five-year transformation was the largest supply chain investment in the company’s history.
Critical to enabling and sustaining the various elements of this transformation work was creating a Six Sigma/High Performance organization. Prior to the split, some parts of the business established a Continuous Improvement (CI) approach for key initiatives, leveraging Master Black Belts as the initiative leaders with on-the-ground Green Belts to execute. There was no consistency in the application of CI across the globe. Maintaining and deploying a sufficient pool of Master Black Belt resources was difficult. There was no standard methodology for CI initiatives, and only a small portion of the business saw benefit from the outcome. A renewed strategy was needed to enable progress.

The applied transformation methodology consisted of establishing a site, region, and global pillar structure. Content masters/leaders were established. Specific metrics and a rigid communication and engagement process were created. These supported progress across critical operating areas such as quality, health, safety and environment (HS&E), autonomous maintenance, progressive maintenance, end-to-end supply chain network, work processes, innovation and initiative management, focused improvement, organization design, education training and leadership.

The model the company applied focused on enabling evolution to a best-in-class supply chain by:

- Unleashing innovation leadership
- Unleashing the power of performance
- Unleashing the power of one integrated supply chain

The global food company believes this model enables:

**Business Results** – Maintain laser focus on delivering business requirements, acquisition/split economics, and competitive advantage

**Lean and 6 Sigma (Improved Efficiency and Flexibility)** – Standard processes for problem-solving, waste elimination, line efficiency, and resource flexibility (flow to work) via a Six Sigma pillar structure

**High Performance Organization (HPO)** – A single culture with a clear mission, values, principles, and metrics and a work environment with zero defects and losses and 100 percent engagement

This relationship is portrayed in the figure on the next page.
To create a sustainable, high performance organization, the following would need to shift:

- Business ownership by all - Everyone looking at what can be done better
- A learning mindset - Everyone desiring to enhance their capability
- A zero-loss mindset - Improvement is good, perfection is better
- Courageous leadership - Balanced risk-taking is encouraged and rewarded
- Servant leadership - The success of the team is reflective of its leaders

These critical HPO components align closely with the best practices (above).
The global food company established critical HPO elements including:

**Critical Business Need (CBN)** - A statement that represents the businesses objectives and strategies. The aim is for it to be a transformative and game-changing concept, while being realistic and aspirational. A CBN:

- Identifies the business objectives
- Defines the reason for being
- Needs to be meaningful and inspirational to everyone
- Needs to be meaningful without requiring explanation
- Needs to be positive, fun, passionate, and visual
- Must be succinct, simple, and emotionally engaging
- Must specify what is expected from the business (measurable)
- Must be aligned to customer and consumer desires (how to win)

The HPO culture is rooted in principles (foundational and enabling/supporting):

**Foundational Principles:**

- Common objectives
- Demonstrated respect for the capabilities of all employees

**Enabling/Supporting Principles:**

- Focus on delivery of business results, 100 percent employee involvement
- Goal-setting and problem-solving, zero losses and defects
- Manage by principles, not rules
- Continuously improving organization
- Effective team work
- Skills and contribution based rewards and recognition
- Informed employees making timely decisions
- Assessment and renewal
Deployment of these elements across the enterprise enabled this large global food company to surpass its goals and deliver amazing results. The savings and cash flow goals were exceeded. Two of the organization’s plants have been recognized with JIPM awards. Plant safety results have improved tenfold to world-class 0.1 RIR levels. In some systems, productivity has improved 400 percent.

These supply chain achievements have been recognized broadly by the corporation and industry SC leaders as critical to delivery of business results and key to enabling stock price improvement.

The supply chain leadership team is currently revising the compelling business need, this time to support new consumer and customer desires. It will enable the supply chain to continue to improve, avoid sitting on a plateau, and envision and climb onward to a new summit.
Summary

Supply chain leaders understand that significant improvements to their organizations are necessary to deliver the 2025 business requirements. An HPO can either provide or cultivate competitive advantage. Benchmark company supply chains view the ongoing nurturing of their culture to create high performance as a basic expectation. Without HPO, supply chain excellence is nearly impossible.

The research conducted for this white paper identified four mega trends that are changing the supply chain’s work and organizational culture, including the rise of the post-baby boomer generations, the digital world, customer revolution, and consumer personalization. The winning companies are those that can create high performance organizations that can thrive in the new “real-time speed of business.”

The research also has identified some critical tenets for success, including:

1. The HPO principles and beliefs (ownership, business-based, be your best) remain a central foundation for addressing today’s biggest challenges

2. HPO best practices need to change in two ways:
   a. Some of the best practices should remain, but need revamped approaches (e.g., 100 percent employee engagement)
   b. Some new best practices need to be implemented (e.g., project- vs. role-oriented career progression)

As we established in this white paper, people are indeed the heart of the supply chain. Benchmark company supply chains and effective supply chain leaders develop supply chain people to be business owners, the best they can be, focused on exceeding business needs. The HPO framework and best practices remain a critical capability for companies and supply chain leaders to deliver sustained excellence.
End Notes

1 Theory X and Theory Y refers to two styles of management – authoritarian or Theory X, and participative, or Theory Y (McGregor, 19. If you believe that your team members dislike their work and have little motivation, then an authoritarian style of management is applied. This approach is very “hands-on” and usually involves micromanaging people’s work to ensure that it gets done properly. On the other hand, if you believe that your people take pride in their work and see it as a challenge, then you’ll more likely adopt a participative management style in which managers trust their people to take ownership of their work and do it effectively by themselves.


Barney, J. “Firm resources and sustained competitive advantage,” Journal of Management 17: 99-120.


# HPO Best Practice Checklist  
**How Are You Role Modelling HPO Leadership?**

To aid in completing this checklist, reference this white paper for definitions/examples of principles and best practices.

## HPO Principles

<table>
<thead>
<tr>
<th>Principle</th>
<th>Not using (0 point)</th>
<th>Starting to apply (3 points)</th>
<th>Systems in place - good results (4 points)</th>
<th>Delivering benchmark results (5 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Be the Best You Can Be</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business-Focused</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have less than 12 points in HPO Principles – STOP HERE. Review leadership behavior, organizational culture, rituals, and systems. Implement changes to get to 12+ points. The HPO is built on a solid HPO Principle Foundation.

## Basic HPO Best Practices

<table>
<thead>
<tr>
<th>Practice</th>
<th>Not using (0 point)</th>
<th>Starting to apply (3 points)</th>
<th>Systems in place - good results (4 points)</th>
<th>Delivering benchmark results (5 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management by Principle</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common Objectives</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Skill</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Task</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Work</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Productive Use of Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System-based</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Everyone Operates and Maintains</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If you have less than 36 points in Basic HPO Best Practices – STOP HERE. Implement changes to get to 36+ points.

## 2025 Best Practices

<table>
<thead>
<tr>
<th>Practice</th>
<th>Not using (0 point)</th>
<th>Starting to apply (3 points)</th>
<th>Systems in place - good results (4 points)</th>
<th>Delivering benchmark results (5 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero-Loss Mindset</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 Percent Employee Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Performance Leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Value Creation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accelerating People Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thriving on Speed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project- vs. Role-Oriented Career Progression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Embracing Generational Differences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HPO Virtual Networks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lean Innovation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subtotal</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Congratulations! - If you have >40 points your organization is high performance.
THE GLOBAL SUPPLY CHAIN INSTITUTE

The University of Tennessee’s Global Supply Chain Institute (GSCI) shapes and influences the practice of supply chain management (SCM) by serving as the preeminent global hub for leading practitioners, academics, and students to learn, network, and connect.

It was in this spirit of engagement and impact that the Department of Supply Chain Management and the Graduate & Executive Education programs in the Haslam College of Business at the University of Tennessee created the Global Supply Chain Institute to serve as their vehicle to extend relationships to industry and to drive an impact on the profession.

If you are interested in collaborating to better understand and advance the field of SCM, please contact us. Ultimately, we want to partner with you to help you identify your SCM strategy and develop your people.

gsci@utk.edu
gsci.utk.edu

LinkedIn: GlobalSupplyChainInstitute
Twitter: @GSCIInstitute
Facebook: GlobalSupplyChainInstitute