# Integrated Parts Management for Multi-Site FM Organizations









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#### Introduction

The COVID-19 pandemic exposed the vulnerability and risk exposure that FM leaders and their organizations face in the global parts and materials supply chain.

#### The current supply chain climate.

- → Prices are up 12-15% on average and climbing
- → Lead times are extended by 30 -50% on some commodities
- → **Stock-outs are increasin**g unplanned downtime on revenue-generating assets
- → Ongoing global supply chain disruptions create a downstream strain on FM organizations.

Unmanaged, highly volatile, and reactive supply chains with a decentralized, fragmented supply base have created operational inefficiencies and increased waste, leaving little room for innovation. The rapid exit of technician baby boomers, and the resulting loss of intellectual property has manifest in growing costs and increased risk exposure.

#### De-risking the parts supply chain.

Since 1971, SDI has supported leading organizations in **de-risking their parts supply chain**, cutting costs, and reducing constraints in their Facility Maintenance.

Over the course of engaging with these organizations, we noticed some common threads:

Retailers were putting limited to no emphasis on parts spend professionally, despite the category accounting for 25-30% of their FM operating budget. This issue also extends to the vendor base that provides services to the stores. This is not a result of willful neglect or ignorance; rather, it stems from the challenges related to managing a geographically dispersed network of facilities through a fragmented base of in-house and third-party service providers and parts suppliers.

→ Some retailers had sourced favorable contracts with a few national parts suppliers, but metrics were largely focused on price and payment terms with **almost no consideration** to inventory availability, delivery, technical & warranty services, etc. As a result, most of the retailers were 'stuck in neutral', forced to seek savings and improvements outside of the parts & materials supply chain to deliver ever increasing value with fewer and fewer budget dollars.

Based on thousands of different SDI engagements, this document provides insight into how FM leaders can:

- → Improve overall service levels
- → **Decrease** direct and indirect supply chain costs.

The performance of any FM team is dramatically impacted by the supply chain and has consequences both upstream and downstream in their organizations. Driving new efficiencies in the supply chain starts with gaining visibility.

SDI's Supply Chain Risk Report is a detailed analysis of the processes, people, and technologies involved in the supply chain. It shows FMs how spare parts and supplies fit into their workflows, and how they directly impact KPIs. For more information on anything in this guide, or if you'd like to talk more about a Supply Chain Risk Report for your organization, please contact:

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# Why FM Leaders Can No Longer Afford to Ignore FM Parts Supply Chain

For any retailer, the cost of FM parts and supplies can amount to between **20-30%** of their total FM budget, but this is only part of the story. Inefficiencies in the parts & materials supply chain and buying process result in **technicians** spending anywhere from 25-40% of their "wrench time" driving to, shopping for, or in some other way waiting for parts – a huge chunk of the budget.

Unfortunately, due to the rapid graying and exit of the maintenance workforce, this productivity drain is only going to increase.

A digitized FM parts supply chain, otherwise known as Integrated Parts Management (IPM), offers immediate opportunity to reduce cost and waste. Recently, IPM has witnessed a significant increase in industry attention and industry participation. Our research indicates that both in-sourced and third-party technicians are now leveraging the digital supply chain – primarily through eCommerce catalogs and online marketplaces, including Grainger.com, Amazon Business, Alibaba, and eBay to locate and purchase FM parts and materials for both preventive and reactive maintenance. But this activity has been limited to spot buys of one-off products, not as a supply chain solution for all sites and technicians.

The primary driver for this shift is **technicians seeking the same buying experience** that they enjoy as consumers – easy to navigate site, wide selection, certainty of availability, and omnichannel fulfillment. This holds especially true in FM, where parts &

supplies procurement involves all products that are used for preventive & reactive maintenance, repairs, and capital improvements.

Experience indicates that digital supply chain has the potential to:

- → **Decrease** total supply chain costs by more than 10%
- → **Improve** end-to-end visibility and control
- → **Improve** maintenance productivity (wrench time) by as much as 20%.

Unlocking the potential of FM digital supply chain through an IPM solution is not an "instant on" nor is it a panacea – it requires effort and is a complex transformation that is best approached as a journey – "Think Big, Start Small, Scale Fast." Many retailers have yet to embark on this journey. However, the root causes of these missed opportunities are known, as are the steps required to overcome them.

This white paper focuses on Integrated Parts
Management and FM supply chain in the Retail sector
and compares current practices with those of best-inclass FM supply chain organizations.

It calculates the potential of FM digital supply chain and details how to realize the benefits. The approach described is based on SDI's experience with one of the world's largest retailers as well as other large, complex multi-site facility operators has been tested and improved in our global practices over the past decades.



IPM integrates thousands of suppliers in one platform while integrating the parts supply chain with your Facilities Management strategy.





## The Strategy: Think Big, Start Small, Scale Fast.

The roadmap proposed in this guide is based on SDI's supply chain transformation philosophy of "Think Big, Start Small, and Scale Fast". We'll discuss strategy and the organization to drive the strategy, processes, and enablers.

Despite the integral nature of parts and supplies to effective R&M, FM departments lack a clear linkage between their enterprise FM/asset management strategy and their parts & supplies supply chain. Even the concept of supply chain management is somewhat foreign in the FM space, most organizations view parts and supplies as a category of spend, not a value lever for enterprise improvement.

The conventional practice has been for field maintenance technicians and/or third-party contractors to purchase materials locally and add a pre-negotiated surcharge/mark-up (10-25%) to the invoice upon completion of the service or repair. This decentralized approach results in 20-30% of the aggregate FM budget for a retailer being off limits in terms of management or optimization. However, it gets worse. When viewed systemically, we see that the decentralized approach to parts management inadvertently impacts several other areas, including:

- → First call completion
- → Maintenance wrench time
- → Asset lifecycle
- → Operating expense
- → Compliance with enterprise CSR strategies and initiatives related to energy, sustainability, and diversity
- → In-store brand experience

As we emerge from the pandemic, FM departments have a unique opportunity to drive significant operational improvements while reducing costs systemically. Within this scope, FM leaders should have an expanded focus on supply chain value creation, e.g. focusing not only on purchase price but also on optimizing the total costs of ownership to a retailer (maximizing technician productivity, asset uptime and in-store customer experience).

This responsibility should also extend to a new center of excellence for facility-essential materials (disinfectants, supplies/equipment related to indoor air quality, etc.) as well as mission-critical spares. These items prior to the pandemic were viewed as commodity items with a low priority. Now they are mission-critical to store operations, brand image, and employee/customer health and safety.



## Integrated Parts Management for Multi-Site FM Organizations



Today's FM teams are often under-resourced and certainly not staffed or organized to address the additional work related to parts supply chain management. The good news is that there is a path forward that does not require a complete reinvention of the wheel. We have noticed that a small percentage of FM departments partner with their in-house purchasing for facility-related parts & supplies.

Although anecdotal, this is relevant evidence that an **enterprise approach to IPM and FM supply chain** can be effective and serves as a model for the build-out of a larger capability. **This hybrid approach** has proven very effective in other industry verticals and can be replicated in the multi-site facility space.

Beyond internal support, progressive organizations in other verticals have partnered with third-party supply chain solutions firms that specialize in supporting maintenance personnel. This hybrid model combines the **best of both worlds** – internal FM subject matter expertise with the purpose-built infrastructure (people, process, technology) of a third party that serves to augment, enhance, and accelerate the results that the client seeks.

It is important to note that in the retail FM environment, **technology is an enabler, not the solution**. Effective FM supply chain management requires people and process enabled by purpose-built technology.









#### The Challenge: Eroding Margins in Retail

The adage that it's not about "how much you make, it's about how much you spend" is more relevant than ever in the multi-site facilities management world. With 44% of sales now coming through eCommerce platforms, the need for effective budget controls and visibility is critical in this highly competitive sector with tight operating profit margins (~ 3%). Retailers and other FM organizations have seen margin pressure steadily increase. A contributor to this pressure has been the demand for effective Maintenance Parts visibility and control.

→ Field Techs spend a staggering 34% of their

time waiting for or looking for required parts for repairs and maintenance. Pressures on the Supply Chain as the economy exits the pandemic will put unprecedented strain on the availability of materials, many of which are critical to the maintenance of the Retail Store environment.

Shortages of FM parts will certainly result in increased costs. Additionally, the downtime experienced from **not having an adequate supply** of parts to service and maintain critical operations for the retailer will translate into higher operating costs, resulting in a diminished buying experience at the brick and mortar locations.

- → Supply Chain challenges will require a fresh look at the need for **local Inventory** to support the needs of Facility Maintenance. Having critical parts on hand will require an investment in not only the materials themselves but the proper SCMS (Supply Chain Management System).
- → Upfront costs of **Sustainability** initiatives will continue to increase as Retailers move to become environmentally responsible citizens. This will be especially true in the U.S. where on average \$1,380 USDs per annually/facility are spent on Sustainability-related expenses as compared to \$4,729 for International locations.
- → Actionable Parts Spend data and advanced analytics are on the critical path to effective

Material Supply Chain optimization. It is estimated that currently 95% of parts-related data is **unstructured** and otherwise inactionable.

With margins under such severe pressure, FM professionals must turn over every rock to improve operating costs, remain price competitive, and maintain

shareholder value. An effective Facilities Maintenance Parts Spend management system will need to become an integral part of total spend controls.







# The Challenge: FM Organizations Trail Behind Best-inClass Supply Chain Organizations

In the not-too-distant past, multi-site retailers managed services much the same way that they manage parts today, namely through a **decentralized** approach to procurement with a highly **fragmented** supply base.

This was due mainly to the lack of CMMS & WOM technology. Despite its enormous size (20-30% of FM budget), until recently FM professionals had no way to access this potentially very rich source of value creation. However, in the post-pandemic retail FM world, that approach is no longer tenable. Shrinking budgets and rising costs (labor and supplies) within Retail FM are forcing leaders to rethink their approach to parts & supplies from a cost of doing business to a source of value generation and competitive advantage.

As we emerge from the global pandemic, facility managers are now seeking to leverage their parts spend by aligning and integrating their parts supply chain with their overall FM strategy to improve outcomes and results.

Bringing parts spend under management yields obvious **parts & supplies savings** (12-18%) but what is not obvious is the positive impact on other elements of value, including:







Innovation in supply chain and other technologies are now enabling what wasn't even conceivable just five years ago.





## The Changing Landscape: Retail/Consumer Standpoint

The pandemic served as an inflection point, accelerating many of the trends in FM while exposing other near-term opportunities for transformation and improvement.

- → Competition is growing -- making the in-store experience more important than ever
- → Store function is evolving due to the rise of the "experience economy" and omnichannel
- → Philosophies are shifting from break-fix to EAM (enterprise asset management)
- → Budgets are shrinking while costs are increasing
- → Organizations are losing intellectual property
  - the knowledge of how to fix assets and where to get the parts will be lost as skilled trades are in short supply and declining YOY
- → In-store digitized equipment is becoming more sophisticated and tied more closely to ever-increasing customer experience & brand expectations
- → Supply base is evolving there's a shift from local stores/supply houses to regional DC's limiting local supply availability

There is growing evidence of a strong desire for supply chain digitization and automation in the FM space.

Technicians and mechanics in the field are leveraging smart phone/device technology to purchase parts from online sources such as Amazon Business, Alibaba, Grainger, and Lowe's. However, this activity appears to be localized and not something driven from management.

## Top two business drivers for digital supply chain strategy Improve customer experience (97%)Digital supply chain strategy Reduce costs (98%) gartner.com Q. Is your supply chain being asked to support the following as a part of a digital business strategy? Source: 2020 Gartner Future of Supply Chain Survey Note: Percentage refers to number of respondents selecting "Support Gartner. Today' or "Support Within Two Years" © 2021 Gartner, Inc. All rights reserved. CTMKT\_1179872



## **Integrated Parts Management** for Multi-Site FM Organizations



Beyond smart devices there are many other technological (and other) enablers of FM supply chain transformation, including:

- → Adoption of smart phones/device use by field maintenance technicians
- → Proliferation of mobile apps
- → Advent of open APIs
- → Supplier digitization and eCommerce in industrial parts space
- → End users embracing data analytics, Al, and machine learning
- → Acceleration of Industry 4.0 and Internet of Things
- → Supply chain as FM value lever
- → Emergence of managed service providers that specialize in FM parts supply chain management





Much of this wasn't even conceivable just five years ago but the change is now accelerating at a rapid pace and is more disruptive in nature. As a result, facilities management professionals that have not taken control over their parts supply chain are rapidly losing their competitive edge over top performers.





















#### **The Good News**

There's good news: Multi-site FM professionals don't need to transform all at once. They can *Think Big, Start Small, Scale Fast* through a step-wise approach:

- → Start with one or a few specific categories (HVAC/R)
- → Begin on particular assets or asset types
- → Start with one region and then roll it out to similar regions
- → Begin with particular Suppliers

**Benefits of an IPM approach** to FM parts and supplies are many and not just limited to the FM domain. Other organizational stakeholders enjoy direct and indirect benefits as well, such as:

#### **Store Ops**

- → Revenue generating asset uptime
- → Better in-store customer experience
- → Minimized FM disruptions
- → Lower operating costs

#### **Maintenance Techs**

- → Improved productivity
- → B2C experience in the workplace (digital vs. analog experience)
- → Job satisfaction less chaos & frustration
- → Visibility to parts availability and shipment
- → Planning jobs and activities improves
- → Improved performance first call completion
- → Fewer emergencies
- → Happier customers

#### **Enterprise FM**

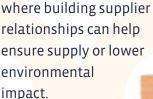
- → Lower costs
- → More control
- → Greater visibility
- → Actionable analytics and insights
- → Budget predictability
- → Risk mitigation
- → Enables reliability and enterprise asset management strategy

#### **Suppliers**

- → Greater visibility to demand
- → Integration with customer and technician
- → Improved inventory optimization

An enterprise plan of best practices can be agreed upon and applied by the FM team and its internal (and/or external) supply chain partners. This includes developing deep relationships with key suppliers and motivating them to continuously

deliver new and innovative ideas to maintain a competitive advantage. Environmentally sustainable materials is an example of one area











#### The Processes and Enablers

FM parts supply chain is enabled by a digital platform that provides a range of digital solutions that combine high automation, deep data insight, and robust spend controls.

- → Open APIs that allow for ease of data passage between the client's asset management system (CMMS) and financial systems (ERP)
- → Apps & Mobility that bring the full power of the FM supply chain to the field technician, regardless of location
- → Inventory Management including central warehouse, truck stock, and remote lockers/ cages
- → A data management and analytics solution that provides real-time online insight into who has bought what, from which supplier, and against which commercial terms and order-to-pay process
- → An e-sourcing solution to ensure sourcing processes run effectively and enable procurement to touch the spend in the supply base frequently
- Omnichannel fulfillment enablement including integrated supplier ordering assistance and local will-call pick up

- → 24/7 Technical Services to assist with repair triage and part selection
- → Effective spend management enabled by automation and catalogs, so low-value transactions can be dealt with more efficiently
- → A supplier portal for ease of supplier onboarding, data management, and performance management
- → A procure-to-pay solution across the organization that links business, finance and procurement effectively. As a result, supplier compliance (as well as control over cash) is optimized. In addition, invoice processing costs are minimized resulting in 95% reduction of administrative FTE.
- → A collaborative procurement strategy solution that enables seamless cross-country category collaboration
- → A 'should-cost' analysis that enables procurement and FM managers to calculate and predict the should-costs of parts and supplies purchased across regions. This allows for fact-based negotiations and optimizes sourcing solutions, for example by replacing expensive OEM parts with lower-cost functional equivalents.









#### The Solution

The quickest path to improving profitability is to **reduce costs**. An eye popping 25% of Facility Maintenance budgets are spent on Parts and Supplies comprised mainly of one-off, non-stock purchases. To make matters worse, approximately 85% of this spend is not purchased under any time of contract, meaning its highly likely pricing I inconsistent and noncompetitive. It would be logical to address the historically **underserved** Parts and Supplies category as a critical part of any cost reduction strategy.

#### **Examples of Typical Retail Spend & Service Categories:**

- → Doors, Locks
- → HVAC/R
- → Plumbing
- → Electrical, Lighting
- → General Maintenance & Repair Items
- → Kitchen Equipment
- → Building Supplies, Roofing
- → Flooring and Ceiling Tiles
- → Material Handling Equipment
- → Janitorial and Sanitation Supplies and Disinfectants
- → PPE, Safety and First Aid



Optimizing the procurement process for these commodities will yield significant near-term results. By moving to an automated, digitized data driven process increases of operating margin of 40 to 70 basis points is readily achievable. A digital supply chain allows you the agility and transparency across your entire supply chain ecosystem, enabling you to respond quickly to demand and better identify savings opportunities. Utilizing a robust digital supply chain ordering platform will not only allow you to place & track needed materials but should provide for powerful data analytics which will be the foundation for supply chain critical activities such as spend visibility & consolidation, trends & compliance tracking, material sourcing, contract negotiation and developing supplier diversification.

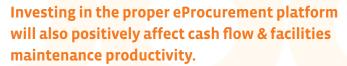
- → eProcurement software and mobile applications enable access to an extensive range of categories for FM parts and tail spend that drives compliance to procurement protocols, yields enriched data for actionable insights, and provides full visibility into enterprise buying with the ability to leverage spending power
- → Data analytics and dynamic sourcing makes it possible for your data to reveal your story, enabling dynamic sourcing by pinpointing where to drive efficiencies in supplier consolidation, cost reduction and productivity.







- → Robotic process automation provides valueadded efficiency improvements, reduces repetitive tasks with exceptional speed and accuracy, and allows resources to go further.
- → Mobile applications allow accurate and timely cycle counting, issuing, picking and delivery tracking. Mobile barcode scanners that feed directly into the inventory management system and technology to enable the more efficient management of industrial repairs and warranties. Software should be intelligent with Al-enabled inventory management, different modeling algorithms which helps burn-off your slow-moving inventory and prevent the further accumulation of obsolete inventory.



- → Impact on operational cash flow --> Volume pricing for significant impact on cost --> Less/right-sized inventory --> Longer payables cycle --> Reduced excess and obsolete parts --> Transactional savings
- Impact on FM personnel --> Staff focused on core competencies rather than shopping --> Stockroom efficiencies / improved planning --> Control of stock items / predictive demand information --> Warranty tracking --> Critical spares identified and stock managed --> Reduction of number of vendors
- → Impact on facilities --> Improved asset uptime --> Improved wrench time and predictive maintenance --> Improved knowledge of asset capabilities --> Improved scheduling of downtime due to on-time parts --> Swifter response to critical outages















#### The Digital Supply Chain Company

Integrated Parts Management in the Digital Supply Chain is a journey, not a destination. The digital transformation promises greater visibility and transparency but depends greatly on an organization's willingness to be flexible and openness to innovation. Only a culture of entrepreneurship or intrapreneurship within a larger organization will drive this shift. It means staying curious. To always find new and better ways, not just as a way to focus on the customer and to push results, but as a way to collaborate and fulfill a natural curiosity and drive to learn. Think big. Have that future vision in mind. What does your integrated parts management journey look like in 3 years, in five years?



#### Start small.

Don't get overwhelmed or paralyzed by the long-term vision. Find a small project and get those small wins under your belt to build confidence and momentum. And scale fast. Take those wins and repeat them for bigger projects for long-term gains. As in any revolution, you will try things and fail. But with the pace of technology changing so rapidly, you want to fail fast. Fail. Fail fast. Learn from it and keep moving forward.

#### About the author



Jim Owens is a member of the Advisory Board for Penn State's Center for Supply Chain Research (CSCR®) and Chief Growth Officer at SDI, the leader in Digital Supply Chain Services and Solutions for MRO. Contributing author

on the recently published Supply Chain Management Review article, **The Longest Yard**, and The Last Yard research featured in the 2019 3PL Study, Jim Owens brings a unique blend of strategic and creative thought to every engagement to foster an environment of proactive collaboration and shared value for clients and partners alike.

Owens has a passion that drives him to develop innovative ideas and strategies to help clients solve their toughest challenges. With a history of commercial and industrial business development for companies like **EMCOR**, **Transfield Services**, and **IFCO**, Owens' experience at creating and implementing successful and strategic value-driven solutions transcends industry sectors.

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