
MRO AS-A-SERVICE

The Shift to the As-a-Service Economy Changes the Value Proposition of MRO BPO

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January 2016

Introduction

In today's flattening world where disruption is the norm, business services need to be about maximizing the speed-to-business impact. The Industrial Internet of Things, machine learning, robotics, automation, and 3D printing, among other disruptive changes in the market are forcing manufacturers to become more agile in order to adapt and respond to shifting market demands. Coupled with sustained pressure for predictability in growth and profits it's no wonder companies are focusing on business process improvement initiatives to stay competitive. This includes taking advantage of the experience and capability that has developed in the global services market over the past three decades since the term Supply Chain Management was coined.

During this time, four building blocks have taken shape: operating models, talent, enabling technologies and a burning platform for change driven by globalization and consumerism. As more and more service buyers, service providers and advisors integrate these elements further within their organizations, we are seeing the emergence of agile, business-outcome-focused solutions. This is what HfS calls the As-a-Service Economy. We have seen it develop across information technology and many business processes including procurement, human resources, finance, marketing and supply chain management.

In this report, HfS is examining the rise of As-a-Service within one most overlooked areas of supply chain/procurement operations—MRO (maintenance, repair and operations). Regardless of where it starts, to compete on a global scale, organizations have to ensure their direct, indirect and MRO supply chains are working together. To do it right, MRO has to be delivered as an end-to-end integrated business process with a global process owner who is accountable for the achievement of results and outcomes that will help the organization overall become more agile and fluid in today's ever-changing market.

MRO is traditionally viewed as part of the overall indirect spend category—which includes items such as critical spares, personal protective equipment and consumables. When managed not just as a spend category, but rather as a well-defined supply chain process, MRO is core enabling and helps organizations gain visibility and control to become more effective, reliable and adaptable.

Architects of the As-a-Service Economy™

Thus, MRO represents a significant opportunity if addressed as an integrated business process; yet it's a tremendous threat for those organizations that do not manage MRO as a well-defined process. But with the value of supply chain management undeniably proven in the direct materials and finished goods arena, and with behemoths like Amazon Business entering the MRO space with the capability of delivering in Manhattan in less than an hour, progressive organizations and sourcing professionals are now looking to manage their MRO and indirect supply as they would their direct supply—an integrated supply chain process.

This report builds on a number of Soundbites that HfS published in 2015 on HfSresearch.com that examined how addressing MRO as an integrated business process empowers the global process owner (in most cases the procurement executives) to drive change and create value far beyond traditional piece price savings, enabling them to directly impact production reliability, machine uptime, employee productivity and enterprise asset management.

As part of our research, HfS has spoken to a variety of procurement and MRO professionals in different industries and enterprises who have shared their specific challenges in getting greater value out of MRO process management. What was most interesting from these discussions is how little has changed within MRO operations over the last 20 years, with many of the enterprises reporting having stagnant, broken or non-existent MRO processes until they began to look at MRO as an integrated business process and sought the resources to support MRO and drive it throughout their enterprise to impact business outcomes.

This report will look in more detail at the potential impact on business of poor MRO processes and the challenges most organizations face when integrating MRO business process throughout their enterprise, particularly in light of the emerging As-a-Service Economy. This report examines these main areas:

- » The MRO conundrum
- » Think differently: Understanding MRO business process in the supply chain
- » The role of the As-a-Service Economy
- » Making the most of the platform and driving innovation

Part 1: The MRO Conundrum

MRO has typically been viewed as an indirect spend category or as materials management, a necessary evil or a cost of doing business. Many approaches to managing it have merely been attempts to extract cost through piece price savings. As we move toward the as-a-service economy we're seeing MRO processes extend beyond procurement and evolve to an integrated, end-to-end process designed with one focus: outcomes.

At its heart, MRO is a business operation that isn't about methodology, but rather about improving how businesses deliver value to their customers and internal stakeholders. It is about core-enabling business processes that can have an enormous impact on a manufacturers' ability to maintain reliable production lines and to service their customer base. MRO is a blend of people and technology that empowers (not only) procurement professionals to *create* value through integrated business strategies rather than *extract* it through category procurement strategies.

The outcome of a well-defined business process is increased effectiveness and improved efficiency. When managed as an end-to-end process, MRO can improve data and inventory visibility, improve spend visibility, optimize inventory usage, drive compliance, increase productivity, increase machine uptime, reduce freight costs, align stakeholders and drive profitability.

The challenge with MRO is that, because it impacts so many different stakeholders from procurement to operations to maintenance and engineering, it is difficult to manage. There are many functional owners, but no single point of accountability and no global process owner. MRO can have tens of thousands of SKUs (stock keeping units) and thousands of suppliers. It represents 50-60% of the transactional volume, yet it accounts for around only 10-20% of the cost of finished goods. Exhibit 1 shows the consequences of a fragmented, disjointed category approach to MRO.

Exhibit 1: The Main Consequences Of Fragmented MRO Operations



Source: HfS Research, 2016

Many of these problems stem from the large number of items that come under the MRO umbrella (manufacturing companies typically have several thousand unique SKUs), the diversity of these products (twelve different types of safety gloves for instance), the lack of standard data to identify the items, the fact that not all items are inventoried in MRO (only adding to the confusion and chaos), and the diversity of the numerous stakeholder groups with conflicting agendas and competing demands.

This confusion can lead to the wrong part being ordered or not ordered on time, leading to the worst issue of all— not having the right critical part at the right time. It is important to remember that in a manufacturing environment the lack of even a single \$10 part can cause stoppages and major disruption to the business if production or delivery lines are brought to a halt even temporarily. One of the main themes from our research and the enterprises we interviewed was that MRO was a necessary evil but that it isn't a subject of management attention until something goes wrong and it causes a major issue.

This lack of attention is at the heart of one of the central issues affecting the manageability of the MRO process, as some of the inefficiencies stem from the behavior of the staff involved, particularly because the MRO process is decentralized and lacks end-to-end management.

Some of the behaviors include:

- » **Maverick buying:** The number of staff with a stake in the MRO process can mean that stock gets bought outside of the control of the process. Staff may not follow standard catalogs or source from the preferred suppliers but are choosing to buy from expensive suppliers who they have used for years or they have a relationship. Which is not in the best interests of the enterprise.
- » **Poor inventory management:** Where the warehousing of spare parts and the indexing of stock is so poor, stock can't be accessed quickly and parts get sourced again to fulfill pressing needs. Parts are available in one location, but sites don't communicate availability.
- » **Just in case buying:** When inventory levels and stock control process is poor this can lead to over buying of items and holding stock "just in case".
- » **Inflexibility:** Where enterprises attempt to make changes to the process and staff don't want to adopt and conform to it. Often with staff looking to justify lack of compliance with any small flaw in the process.

Because of these ingrained behaviors and the natural resistance to change, it is important to change the way staff think about MRO, to give them an incentive to change and elevate MRO beyond the price of spare parts. Improving MRO is not about outsourcing for outsourcing's sake. It's about a redesign to integrate processes, people and technology—empowering procurement professionals to take ownership and accountability for delivering adaptable, flexible and intelligent business operations.

Part 2: Think Differently— Understanding MRO Business Process in the Supply Chain

What HfS has seen through our research is that value needs to be *created* rather than extracted. In many cases, MRO is fragmented and has been left unmanaged or managed inconsistently across different locations. This sub-optimized process compounds these problems and leads enterprises to employ ad-hoc or bespoke coping mechanisms to ensure continuous supply.

Over the last few years, there has been a shift in mindset. Companies have been focused on improving effectiveness and efficiency. Enterprises have undergone initiatives in Business Process Re-Engineering, Lean, Six Sigma and other Business Process Improvements focused on eliminating waste and creating value through process transformation.

For MRO, it's about transforming a fragmented, decentralized set of activities and processes into a single, holistic integrated mission-critical, core enabling business process. This process has a mission, objectives and an owner accountable for the results.

Managing MRO as a business process, rather than as a category procurement event, has tremendous potential to impact effectiveness and efficiency, not only at the business level, but also at the team and personnel levels.

Some obstacles presented by the category approach to MRO include:

- » Decentralized process and lack of structure
- » No accountability and finger pointing
- » Strained working relationships
- » Inhibits collaboration on core issues

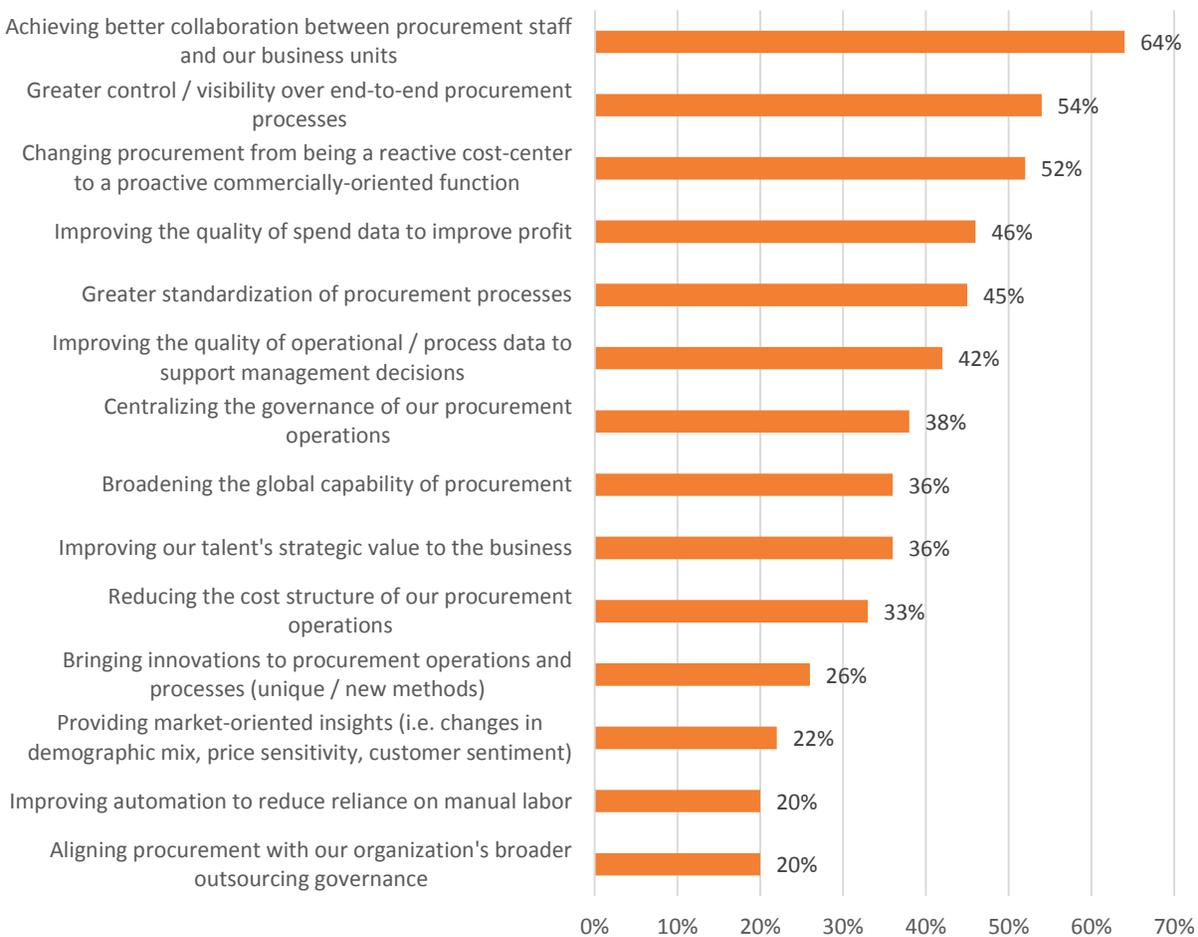
On the other hand, some key areas of motivation that result from managing MRO as an integrated process include:

- » Career advancement
- » Improved quality of work
- » Team and organizational pride
- » Ability to focus on core issues

The business process management of MRO, thus, improves performance for the various stakeholders while allowing the enterprise to work in tandem, synchronizing and optimizing not only the direct supply chain but also the indirect supply chain. One of the things that we heard most clearly from the MRO professionals we interviewed was the need to align stakeholders, as can be seen in Exhibit 2.

Exhibit 2: What Business Outcomes Are Procurement Staff Looking From Outsourcing?

How important is achieving the following business outcomes with your organization’s current shared services and/or outsourcing program, over the next 2-3 years? (Just “Critical to the Success of the Program” responses)



Source: "Procurement Index" Study, HfS Research, 2014
 Sample: Enterprise Buyers Manufacturing & CPG = 49

The leading driver is to achieve better collaboration between procurement and business units in the enterprise. However, perhaps the most interesting drivers are the next two, with a very clear desire for enterprises to get better control and visibility of the end-to-end process and to operate procurement—in this case MRO—more like a business.

Traditional procurement and storeroom labor service providers have come in and out of this market with point solution offerings in recent years to diversify from general indirect procurement, but in conversations with these professionals, it's clear that those offerings haven't been especially effective as they don't enable MRO as an end-to-end business process. The requirement for on-site staffing, the often sporadic nature of the purchasing with a long tail of small value items interspersed with high value—low volume specialized items, makes it hard for generalist service providers to get the required economies of scale and depth of knowledge that their category manager models require. The economics can be even harder for general procurement service providers when the client wants to pass over some of the inventory financial risk, necessitating strong analytics to manage demand and discussions at the C-suite about taking balance sheet risk on behalf of clients. Given the cost of failure to the client, it can lead to the service provider not being able to take the steps required to deliver value.

There are three main actions that need to be taken to make MRO a more proactive, collaborative, and value-driven business model:

- » Design MRO to fit the needs of the business today and tomorrow, not the business as it was
- » Build a strong inventory management system that operates As-a-Service
- » Run MRO like an end-to-end business with a motivated owner exceeding expectations

To get acceptance that MRO can be a part of solving larger business problems; we first have to get beyond the attitude that MRO is a necessary evil. Instead, it should be seen as a core-enabling business process that delivers simplified, intelligent and nimble operations. In this model, MRO staff have defined roles, responsibilities and processes—with ownership for continuous improvement. Having a different, more business-like perspective engages staff and enables MRO to have a much greater influence on driving strategic business outcomes, treating the enterprise more as a customer.

By managing MRO as a business process, and in the process removing complexity, enterprises benefit from the predictive analytics and actionable data that enable greater transparency, predictability and control. The main goal is to understand the reasons behind current spending decisions and to model the ongoing critical spares and non-critical parts to support the enterprise's assets. This goes beyond looking at the numbers but includes understanding the lifecycle of the supply. Having an effective and integrated end-to-end business process means controlling the cost levers, knowing why holding certain stock is necessary and understanding how the performance and longevity of certain sub-categories may impact production. While getting the basics right—tying together the data management, the requisition-to-sourcing-to-settlement process, the storeroom and inventory management, and the reliability engineering—is a crucial step before being able to achieve clear, actionable data and advanced

analytics for stock prediction techniques, it's important to ensure that the process remains aligned with the evolving needs of the business and that the process effectiveness is measurable.

Building this understanding and on-going visibility into the business process leads to its long-term success. Building a strong MRO process is no longer just about parts; it's not even about sourcing the cheapest parts. It's about moving beyond the status quo, accelerating towards process management and aligning organizationally to establish an MRO supply chain that delivers real business outcomes. It's about process and supply chain management that enable business professionals to impact enterprise goals like reliable production, better management of the asset base, risk mitigation, cost reduction and sustained value creation.

To make all of this work, it's also important to invest in enhancing communication in the enterprise around MRO especially between the process teams and the other stakeholders. Too often, we have seen MRO sourcing contracts fail because they are viewed within the silo of sourcing and do not address the business needs of key stakeholders across the enterprise. The key to a business process as complicated as MRO, is flexibility, because while the process should be integrated throughout the enterprise, businesses haven't had the need to invest in the systems, processes and technology internally. But with the manufacturing industry shifting, enterprises need to be nimbler and reliable - making the case for outsourcing the MRO process even stronger. Making sure the relationships and the people are as proactive as the processes will help avoid creating ever-escalating issues.

The enterprises we spoke with as part of this study were keen to emphasize that the solution to MRO challenges really starts with addressing the root causes, rather than solely where the symptoms are manifesting.

Exhibit 3 captures the key issues facing three different types of enterprises we interviewed and although the issues differed between these enterprise, many of the eventual solutions were similar: run the process end to end, have a good stock and inventory tracking process run by professionals and measure the success through KPIs.

Exhibit 3—Outcomes for Getting the Basics Right

Manufacturing Firm (US)	Education Campus (US)	Pharma Manufacturing (US)
Issues <ul style="list-style-type: none"> • Distributor model - per item price focused • Sites managed independently • No technology • In excess of 80K orders per year 	Issues <ul style="list-style-type: none"> • Need items fast • Need best price • Must have proportion of local sourcing • Inventory was poorly managed and often out of stock of common items (7-8 days' requisition to receipt) 	Issues <ul style="list-style-type: none"> • Regulated industry • Broad range of products (5K+ diverse types of SKU—with broad range of cost and in demand profile) • Uptime crucial—were at 20-30 stock outs per month
Solutions/outcomes <ul style="list-style-type: none"> • Integrated / central approach—communication across sites • Holistic approach to savings • Store operations run by professionals • Integrated technology • Multi-million \$ savings 	Solutions/outcomes <ul style="list-style-type: none"> • Standardize and put in place end to end process • Better communication between stock controller and maintenance team • Stock levels are known • Proactive about requirements • Requisition to receipt down reduced by 5 days 	Solutions/outcomes <ul style="list-style-type: none"> • Centralize process, KPIs • Analyze stock requirements • More integrated use of technology—hand held devices scan parts and tools to reduce mistakes • Stock outs reduced to 1-2 per month • 10% reduction in spend (c\$1m)

Source: HfS Research, 2016

These enterprises all achieved significant results by shifting to a holistic, end-to-end process for MRO, with both manufacturers achieving million-dollar cost savings. All of the enterprises cited professionalism of the staff in the process chain as one of the key factors in improving the process.

So where does this leave buyers? In recent [research](#) HfS has examined how the sourcing world has to change due to the emergence of the As-a-Service Economy. MRO is being affected by these changes as well. HfS is seeing tremendous opportunity in the new type of MRO service that is emerging, partly due to the development of new technologies and capabilities (including SaaS platforms), better analytics and improved risk management capabilities that help service providers add value. Service providers and service buyers are more willing to consider new types of commercial arrangements that create greater benefit and value for enterprises than from arrangements previously available. Previous trends of outsourcing the source-to-pay value chain are being disrupted by new and innovative models such as MRO supply chain As-a-Service. These rapidly-evolving, outcome-based models enable CPOs and progressive business leaders to extend their reach beyond traditional category management to deliver enterprise value measured, not in piece price, but in terms of invested and human capital productivity, total cost of ownership, working capital reductions and risk management. It's no longer just about procurement or who can buy the cheapest parts. It's about process and the ability to align organizationally to establish an MRO supply chain that delivers real business outcomes.

Part 3: What Role Does As-a-Service Play?

With this in mind what opportunities does the emerging As-a-Service Economy offer for enterprises that want to extract greater value from their MRO operations? Supply chain As-a-Service is the mechanism that shifts the MRO paradigm from being about parts to being about process excellence, whereby organizations can now source and procure solutions and outcomes, not just supplies. This goes well beyond traditional prepackaged product/service (distributor) models that deliver functional value measured in piece price savings. The As-a-Service Economy is driving outcome-centric models that deliver enterprise value measured in machine uptime, production throughput, invested & working capital efficiency, labor productivity, and total cost of ownership.

HfS deliberately uses the word “economy” to emphasize that the next phase of sourcing is a new way of engaging and managing resources to deliver services. Rather than just another “model,” “economy” emphasizes the breadth and staying power of this development. This As-a-Service Economy focuses on what matters to the end consumer, whether that is within a company’s shared services organization, one or more business units, or in the company’s target audience or customer base.

It’s about simplification. This transition to As-a-Service means removing unnecessary complexity, poor processes, and manual intervention to make way for a nimbler way of running a business. It is also about prioritizing where to focus investments to achieve maximum benefit and greater outcomes for business operations.

The emerging As-a-Service Economy will be more agile and dynamic, featuring on-demand plug-and-play services targeted to impact what matters to consumers as well as business. The two are increasingly intertwined as consumer insights, decisions, and loyalty carry increasing weight in the success or failure of an enterprise in any industry.

HfS has developed Eight Ideals that help an organization become an As-a-Service Enterprise (see Exhibit 4). To move toward this state, it is beneficial to begin with a willingness to write off any legacy investments in technology and operations and progress to the use of design thinking as a way to look at business challenges and opportunities with a fresh perspective. Then an enterprise can orient governance and relationships toward building service solutions with the optimum capabilities, regardless of their source. Moreover, enterprises can build the right commercial arrangements that break from past “zero-sum” constructs to encourage sustained collaboration and shared outcomes. These are the core building blocks, the Ideals for enterprises embarking on the change management required to make the transition to the As-a-Service Economy.

Exhibit 4: Transitioning to The As-a-Service Enterprise

	IDEAL	FROM	TO
CHANGE MANAGEMENT	Write off Legacy	Legacy technology investments which limit business agility and create masses of exceptions usually addressed through adding internal and external FTEs	Using platform based solutions, DevOps, and API ecosystems for more agile, less exception oriented systems
	Design Thinking	Resolving problems by looking first at the process as the source of the solution	Understanding the business context to reimagine processes aligned with meeting client needs
	Brokers of Capability	Focusing governance and operations staff on managing to the letter of the contract and the decimal points of service levels	Orienting governance to source expertise from all available sources, both internally and externally, to address capability gaps
	Collaborative Engagement	Evaluating relationships on baselines of cost, effort, and labor	Ensuring relationships are contracted to drive sustained expertise and outcomes
SOLUTION IDEALS	Intelligent Automation	Operating fragmented processes across multiple technologies with significant manual interventions	Using of automation and cognitive computing to blend analytics, talent, and technology
	Accessible & Actionable Data	Performing Ad-hoc analysis on unstructured data with little integration or business context	Applying analytics models, techniques and insights from big data, real-time
	Holistic Security	Responding reactively with post-event fixes. Little focus on end-to-end process value chains.	Proactively managing digital data across service chain of people, systems & processes
	Plug & Play Digital Business Services	Undertaking complex and often painful technology transitions to reach a steady state	Plugging into “ready to go” business outcome focused, people / process / technology with security measures

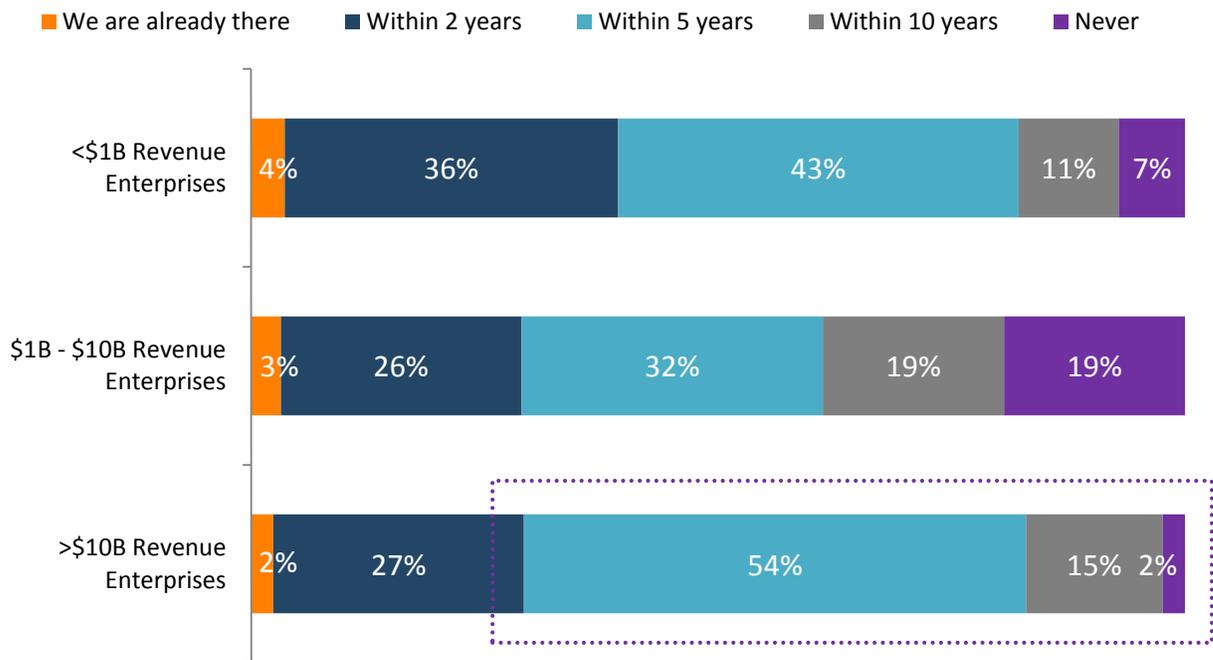
Source: HfS Research, 2015

With those change management ideals underway, it is then possible to craft an As-a-Service solution that incorporates talent, processes and technology to achieve the solution Ideals of Intelligent Automation, Accessible and Actionable Data, Holistic Security and Plug and Play Digital Business Services.

In our research, we’ve found that there are some pockets of progress; many enterprises have embarked on this endeavor. However, the journey has only just begun and, frankly, there are some who have yet to realize that there is a journey to take. For most enterprises today, as our new study reveals, As-a-Service is still largely a pipe dream, with seven-out-of-ten major \$10B+ enterprises viewing at least a five year plus timeframe before they have made the leap to As-a-Service with their core enterprise processes (see Exhibit 5).

Exhibit 5: Major Enterprises Are “Kicking the Can Down the Road” When It Comes to As-a-Service

How quickly will your core enterprise processes be delivered “As-a-Service”?



Source: "Ideals of As-a-Services" Study, HfS Research, 2015
 Sample: Enterprise Buyers = 178

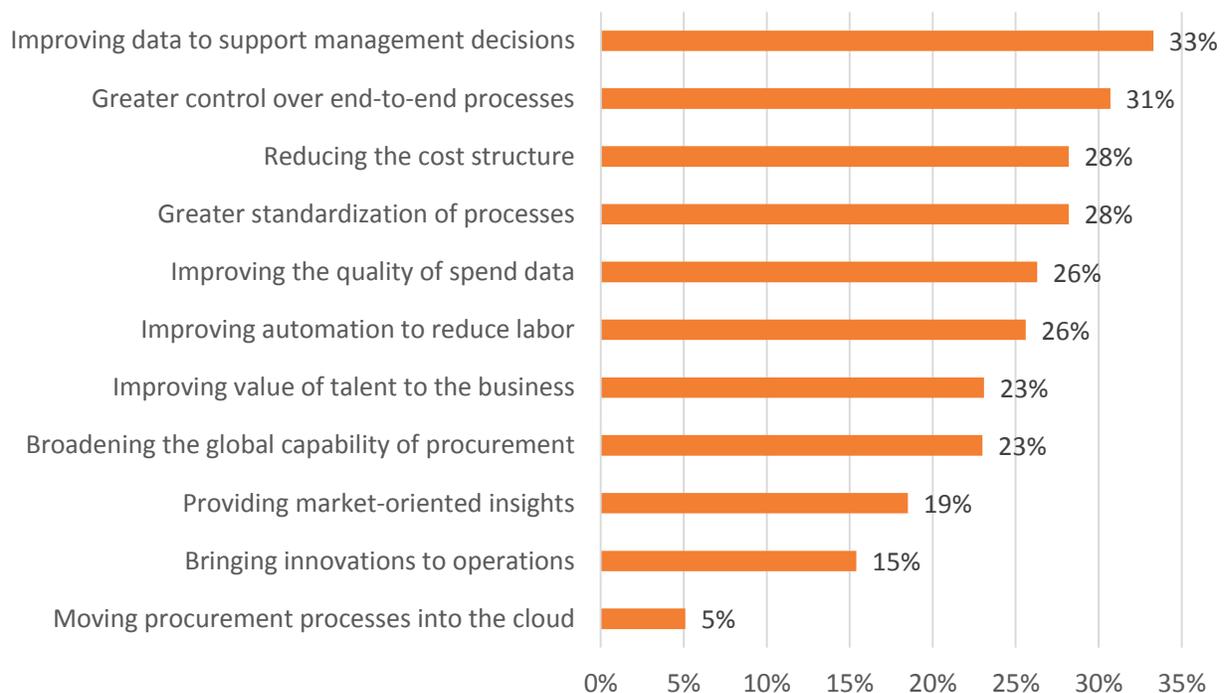
Service buyers, advisors, and service providers need to take a hard look at what they want to achieve and how these ideals can help them get there. Then they need buckle down and commit to new levels of collaboration and get creative with investments in resources and partnerships to simplify and focus.

Part 4: Making the Most of the Platform and Driving Innovation

For MRO, the journey toward As-a-Service starts from the solid core of integrated business process described above. With one of the most important benefits of having a solid core MRO process being the resulting clean data that is captured. The more of the operation that goes through the official process, tying the process together from end to end, the more that clean data will emerge on the true nature of the MRO supply chain and what is available for use. Our research shows that improving data quality and getting greater control and visibility of end-to-end processes have the biggest impact on achieving desired business outcomes (see Exhibit 6).

Exhibit 6: Major Manufacturing Firms Are Using Technology to Improve Data Quality

Across your current procurement function, please indicate the CURRENT impact your procurement technology is having on helping you achieve the following outcomes (“To a considerable extent” and “To a huge extent” responses only)



Source: "Procurement Index" Study, HfS Research, 2014

Sample: Enterprise Buyers Manufacturing & CPG = 46

Standardization also has a big impact on achieving business outcomes in the MRO process amongst the manufacturing and CPG enterprises we have surveyed. This, coupled with the data improvements and end-to-end

process reform, underpin the desire to move toward more as-a-service delivery of MRO processes. We see a new form of MRO being delivered via digital platforms supporting on-demand analytics that are offered by service providers who use the smart insights delivered on the MRO process to create new commercial models for their enterprise clients.

The opportunity for the enterprise to get greater value and agility out of MRO by moving away from legacy processes is fueled by the more agile and dynamic plug-and-play digital platforms available today. These platforms deliver MRO services with a model that delivers an end-to-end process. An As-a-Service MRO provider will structure the capability to focus on business outcomes for the enterprise that go beyond product purchase price to deliver value - a key differentiator from the traditional distribution models. Enterprises get these results for MRO by plugging into high-quality, reliability-focused, standardized business processes delivered through integrated technology platforms that deliver As-a-Service. The key to the success of these platforms is usability; it needs to provide users access to all their process needs in one spot. To be most effective, an as-a-service platform will collect all of the relevant data, link to all the available material catalogues, empower requests via mobile channels, support advanced inventory management, warranty tracking, and enable connectivity with the organizations full range of other enterprise software.

These new technology platforms are making it easier to deliver and manage MRO processes across individual locations and the enterprise, but achieving the business outcomes is also dependent on providers who have an end-to-end vision for MRO, a clear roadmap to achieve that vision and the identification of best practices across the various MRO processes. Leading technology is not enough; instead, technology's value is enhanced by having skilled professionals who own MRO for the enterprise and by having engineering capabilities to support product development and maintenance as well. As this model evolves, the new platforms will be able to help enterprises by allowing integration into additional services like predictive analytics and the management of end-to-end capabilities without being reliant on legacy or clumsy ERP systems. Partnering with service providers who are already looking ahead will help manufacturers accelerate beyond traditional labor arbitrage and transaction processing towards more effective, adaptable, fluid and well defined supply chains.

The availability of new digital platforms is not the final end state for technology adoption within the MRO process. In some ways this is just about creating a new technology baseline capability against which future innovations that impact MRO can be better integrated and managed. For instance, when HfS Research discussed with enterprise MRO buyers the next major innovations coming into their businesses the top three they mentioned were:

- » Predicting stock
- » Localized or point-of-use part provision through industrial vending machines
- » 3D scanning/printing

Exhibit 7 shows a cross section of innovation agendas for MRO Operations from some of the enterprises we have interviewed.

Exhibit 7—Use of Innovation on MRO Operational Issues

Manufacturing Firm (US)	Education Campus (US)	Pharma Manufacturing (US)
Issues <ul style="list-style-type: none"> • Parts not close to where needed • Keeping track of parts • Some custom parts and end of life items needed 	Issues <ul style="list-style-type: none"> • Campus is large - part storage not close to where it is used • Store room not open 24 hours • Keeping track of parts accessed/used out of hours 	Issues <ul style="list-style-type: none"> • Expensive parts being held just in case • Sometimes hard to identify part / ensure it is correct
Solutions/outcomes <ul style="list-style-type: none"> • Industrial and smart vending, so parts are close at hand • Handheld devices identify and record parts • Investigating 3D printing for end of life and custom items 	Solutions/outcomes <ul style="list-style-type: none"> • Industrial and smart parts vending around campus - particularly in outlying areas 	Solutions/outcomes <ul style="list-style-type: none"> • Predictive analytics / data analytics identified cycles and reduced inventory • Handheld scanners identify and record parts

Source: HfS Research, 2016

Holding unnecessary stock is an expensive part of MRO, but not as expensive as not having a crucial part when needed, so these predictive analytics tools that monitor stock requirements are seen as incredibly valuable to MRO professionals. Similarly, giving staff easy access to frequently used and critical spares and components, close to the point of use via smarter industrial vending and point-of-use systems was also seen as of great potential, particularly when coupled with RFID and predictive stock replenishment solutions. Finally, although a relatively nascent technology, 3D scanning/printing has enormous potential. With buyers excited by the ability to create parts/tools on-demand, plus extending the life of equipment by producing parts that are hard to find, that require customization or are end of life.

This is not the end to the increased use of technology within the MRO process. Indeed, it just highlights the need for a strong set of tools and a process that can accommodate change. One of the most important aspects of having a good core process based on a standard platform is its resilience. When new technology emerges these platforms can adapt, adopting the new technology and providing a process for collecting data and assimilating into the end-to-end process.

Advice for MRO Leaders as We Evolve to the As-a-Service Economy

- 1. The process (as well as the people) needs to be the hero:** The effectiveness of MRO (and many other complex processes) often boils down to the skill and dedication of one or two key staff members. Without their efforts in mobilizing the adoption of change, the process fails. This can be a problem when people leave and when you want to share best practice across the organization—it's no good if MRO works well in only one location. The process needs to be robust enough to help dedicated staff and manage the others.
- 2. Senior executives need to be bought into the process:** Without support from senior executives, the impact of any change to MRO can be short-circuited. Without a shared vision and an executive mandate, it can be hard to get a universal global approach, and it will make any transformation harder to implement, lowering the likelihood of success. This is particularly true because MRO touches so many different functions of the business. Senior executives will need to align the interests and perspectives of those various stakeholders with a shared vision.
- 3. You still need the right people:** Even the best process is made better by good people, particularly in an outsourced environment. One common thread that stood out clearly in our research was that having professionals running each stage of the process was vital to the overall success.
- 4. MRO is crucial for the overall success of your business:** As we showed above, MRO is often a forgotten element of the business, quantifying its impact in terms that demonstrate its business impact over and above the negative issues it is often associated is vital.
- 5. Relationships are a vital part of the process:** It seems trite, but it's true. Without good relationships, the process breaks down. This is the relationship between the supplier and the client in an outsourcing relationship; it is between the outsourced staff and the client staff; it is the storeroom and the engineers; and it is the storeroom and their parts suppliers. The outsourcer needs to be part of your team. Before any contract is signed you need to ask yourself: can I work with these people? Can my staff work with them?
- 6. Get the basics right:** Having a good core set of processes operated end-to-end that are accepted and followed across the enterprise, brings the biggest value. The additional benefits from having better data, also bring additional savings and broader adoption.
- 7. Audit yourself:** Make sure you have as much information about your own process as you can before bringing in anyone external. This ensures that you understand the current state and that you know what problems and processes are being outsourced. This also means you can identify the main objectives you want to achieve and make sure it is in the contract.

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8. **The process never ends:** Make sure, whatever route you take, that include continuous improvement and have the flexibility to adoption new technologies as and when they emerge. Given the pace of development in this area, you don't want to be left with another burning platform.

Conclusion

Procurement executives and business leaders are seeking a catalyst to propel their operations into this changing As-a-Service Economy by partnering with service providers who have end-to-end capabilities. Viewing MRO as a core-enabling, mission-critical business process, rather than as simply parts or a cost of doing business, will empower leaders to drive the change necessary to reduce cost, balance risk and increase value in the face of globalization and consumerism. MRO As-a-Service is part of the supply chain ecosystem that provides a collaborative learning environment, allowing enterprises to plug into the latest thinking and emerging technology to transform the conversation from cost to value. Progressive companies will not hesitate to become a part of this type of collaboration to integrate this business process into their operations and transform their cost-focused businesses into value-driven businesses.

HfS would like to extend a special thank you to SDI for its support of this study.

About the Authors

Jamie Snowdon



Jamie Snowdon has primary responsibility for overseeing the development of HfS' quarterly demand tracker, in addition to managing and developing the firm's data-centric products and services. He works across the HfS analyst teams to define evolving services markets and create market size estimates and forecasts. He also manages HfS' quantitative survey and benchmark data. Jamie has over 18 years' experience in the IT and business services industry. In that time, he has worked in a variety of roles, including sales, marketing, consulting and as an industry analyst. Jamie's analyst career has largely been spent conducting data analysis including market size/forecast models, quantitative/qualitative survey analysis and competitive analysis.

Prior to HfS, Jamie has worked for a number of analyst firms including IDC and Nelson-Hall. He worked as a Research Director for Nelson-Hall, where he conducting vendor and market analysis examining the IT and Business Services community. Additionally, Jamie has spent several years at IDC, most recently as the head of European infrastructure services research. Prior to that he was the European consulting director for IDC's services group, managing all of their bespoke research. Jamie specialized in delivering custom market forecast models and forecasting tools tailored to his client's individual needs. In addition, Jamie ran IDC's European outsourcing research, covering both IT and business process outsourcing. Jamie has wide industry knowledge covering IT consulting, enterprise applications, IT & business process outsourcing, desktop & network services, equipment maintenance, and business continuity.

Earlier in his analyst career, Jamie spent four and a half years at the IT services research specialist INPUT in a mixture of marketing and analysis roles. He left as the UK operations manager having spent two years as a customer services industry analyst. Jamie completed his graduate training at one of the UK's leading electronic and IT distribution companies. Jamie's passion is learning; he holds university degrees in general science (computing), law and has a postgraduate diploma in legal practice. He lives in Twickenham, London with his wife, and two daughters. His other loves include cycling, reading trashy sci-fi, cool technology and the perfect pint.

You can find him on Twitter [@TheWizeOne](#) and via email at Jamie.Snowdon@HfSresearch.com.

Charles Sutherland



Charles Sutherland is the Chief Research Officer at HfS. Charles is responsible for the overall research agenda for HfS across the “as a service” economy. He personally covers the areas of automation, business platforms, supply chain, procurement and various vertical processes. Since joining HfS in 2013, Charles has had the opportunity to speak at various industry forums including NASSCOM and has had his research covered widely in the business and outsourcing press as well.

Charles has been in the business services market for 20 years including previous roles as the Chief Strategy Officer for a BPO service provider and the Managing Director, Growth & Strategy for Accenture’s Operations Growth Platform. In these roles he has had a breadth of experience in thought leadership, strategy development, acquisitions, business development and long term investment planning in both BPO and ITO.

Charles has also had Growth & Strategy roles for Accenture in Infrastructure Outsourcing and for the Communications, Media and High Tech Operating Group. Prior to that he was a Strategy Consultant in London for Accenture serving clients in the Media, Communications and Consumer Goods industries. If you go even further back in time he was also a Marketing Director for Olivetti in Canada and Europe.

Charles has an MBA from INSEAD in Fontainebleau, France and an Honors BA in Economics and Political Science from the University of Toronto.

Charles now resides in Southlake, Texas but still keeps the Boston Red Sox bumper stickers on his Prius so clearly he hasn’t become a proper Texan just yet.

Charles can be reached at charles.sutherland@hfsresearch.com and followed on Twitter [@cwsuther](https://twitter.com/cwsuther)

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We coined the [As-a-Service Economy](#) term because we see a profound change under way that is more all-encompassing than a simple business model or product line. It's a global shift that will leave few sectors of business or society untouched.

To help our clients and the market get to the As-a-Service Economy, we serve the strategy needs of business operations and IT leaders across finance, supply chain, human resources, marketing, and core industry functions in organizations around the world. HfS provides insightful and meaningful analyst coverage of best business practices and innovations that impact successful business outcomes, such as the digital transformation of operations, cloud-based business platforms, services talent development strategies, process automation and outsourcing, mobility, analytics and social collaboration. HfS applies its acclaimed [Blueprint Methodology](#) to evaluate the performance of service and technology in terms of innovating and executing against those business outcomes.

HfS educates and facilitates discussions among the world's largest knowledge community of enterprise services professionals, currently comprising 100,000+ subscribers and members. HfS Research facilitates the HfS Sourcing Executive Council, the acclaimed elite group of sourcing practitioners from leading organizations that meets bi-annually to share the future direction of the global services industry and to discuss the future enterprise operations framework. HfS provides sourcing executive council members with the HfS Governance Academy and Certification Program to help its clients improve the governance of their global business services and vendor relationships.

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