

Buying and flying: Next-generation airline procurement

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Airlines have been saving through strong purchasing for decades. But with unit revenues declining, procurement must step up to the next level.

Airlines perform a service that defines the modern age and is used by billions of people every year. Yet they do not make money at it. Over the most recent economic cycle, which included some excellent years, airlines still destroyed nearly \$20 billion in value for their shareholders. Suppliers do much better (Exhibit 1). For example, aircraft manufacturers made \$2 billion. Maintenance and repair organizations (MROs) along with providers of ground services and catering made \$1.5 billion. And global distribution systems made \$500 million and have enviable margins.

Often, more than 60 percent of an airline's cost base goes to suppliers. Admittedly, lowering these costs is difficult. Many suppliers are oligopolies. There are two caterers at most airports, two aircraft manufacturers, and two main choices of host-system providers. There is one choice of airport in many cities. And some costs are not negotiable, such as fixed tariffs for airports and air-traffic-control charges. Many contracts are long term, and some such as aircraft and MRO deals have hidden escalation clauses or penalty fees that airlines often don't consider up front.

But even acknowledging these structural challenges, airlines don't procure as well as other companies. Our research indicates they lag on the core skill of category management and on other dimensions of performance (Exhibit 2). Procurement teams are too often passive. They are seen by senior management mainly as a support function—called in as late as possible in the buying process—rather than as a strategic partner to drive down costs and optimize products and service levels.

To be clear, we are not talking about the classic procurement work of benchmarking prices, which is hard and not valid for most carriers. The differences in country and business model are too great. Internal benchmarking can help a bit. But the real drivers of purchasing excellence are a procurement strategy aligned with the airline's overall strategy, skilled teams of professionals in procurement, an innovative approach to category management and supply-chain design, and structures that encourage a fruitful business-procurement partnership (Exhibit 3).

Looking across these four areas, we highlight some innovations by leading airlines that all procurement teams could usefully adopt. We conclude with some steps that carriers can take to bring procurement to the next level.

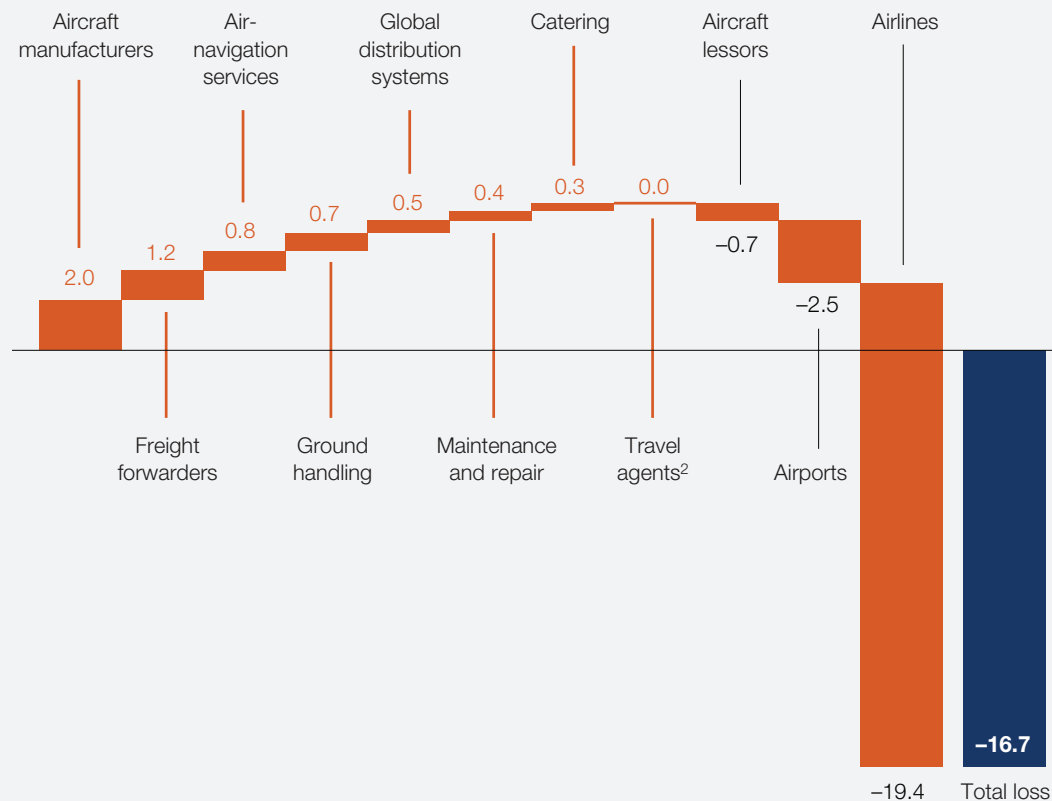
Strategic alignment and posture

Airlines' unit revenues are headed in only one direction: down (Exhibit 4). Airlines are becoming more efficient over time, by increasing in scale, optimizing the product delivery, and buying newer, more efficient planes. The improved efficiency over time reduces the unit cost base. Unfortunately for airlines (but happily for their customers), a highly competitive industry compels carriers to pass on these benefits to consumers in the form of lower unit prices.

With unit revenues in decline, driving unit costs lower is critical. All airlines need tight cost control as a key part of their strategy. But keeping costs low is not the same as aligning the cost strategy with the corporate strategy, the first of two strategic moves that leading carriers make.

Exhibit 1 Suppliers capture the surplus in the aviation business system.

Average yearly economic profit,¹ 2007–14, \$ billion



¹Based on invested capital; excludes goodwill.

²Rough estimate; insufficient data to provide reliable estimate.

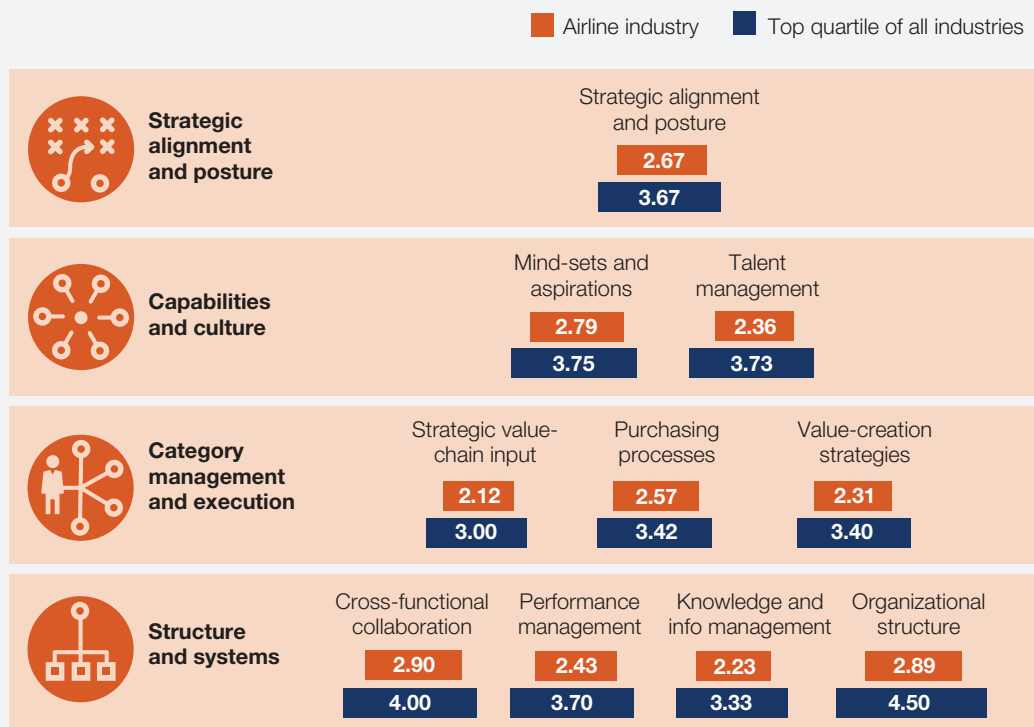
Source: International Air Transport Association; McKinsey Value Chain Model

Many airlines lack understanding of what really drives value in the customer experience and what customers are willing to pay for. For example, some carriers demand the best of everything—best seats, best lounges, best onboard catering—even though customers do not value these amenities at the same level or in the same way. Others believe in absolutely lower cost with no frills, missing opportunities to provide services that customers actually value.

Leading carriers have a firm grasp on customer willingness to pay, and the product and experience is tailored toward this. Procurement teams know the categories where it is worth spending more for quality rather than aiming for best price. For example, one carrier we worked with found that good sleep was by far the largest driver of customer satisfaction in medium-haul business class. It retrofitted fully flat seats and upgraded to duvets, while cutting back spend on catering. And

Exhibit 2 Airlines lag considerably behind best-practice procurement.

Procurement performance, score out of 5



Source: McKinsey Global Purchasing Excellence Survey

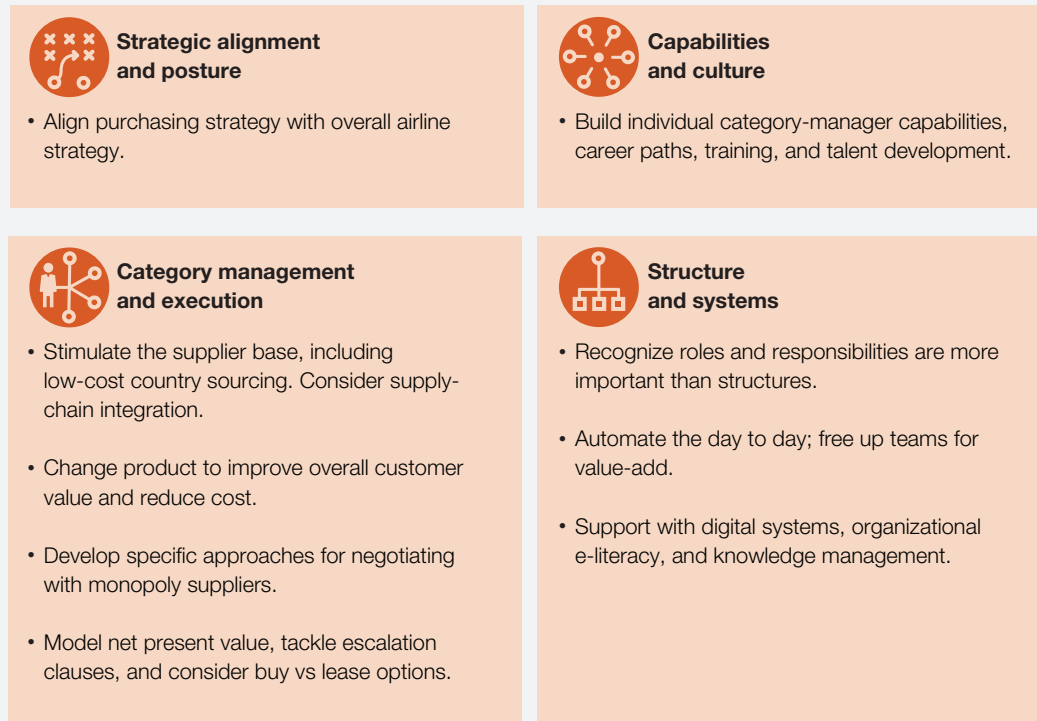
it kept the lights off as late in the flight as possible, reducing the demand for (and cost of) breakfast.

A second move is to control the full base of spending. Airline procurement often does not cover all the carrier's spending. Other departments claim that their needs are unique or that their knowledge is essential to the purchasing process, and so they need to be outside the scope of procurement. For example, engineering stresses the high level of technical knowledge needed and how critical safety is. Flight operations may believe that

fuel purchasing is a commodity without price-optimization levers and that demand management requires working closely with pilots and, hence, fuel management must be owned by them. Business units may specify and choose IT systems, citing their special requirements, leaving procurement to manage the contract afterward.

These obfuscations prevent purchasing from coming to grips with substantial costs; procurement teams at leading carriers typically control 70 to 90 percent of total spending.

Exhibit 3 Four sets of actions can improve performance.



Purchasing teams can earn the right to manage these costs by demonstrating success. Alternatively, the executive committee (which already realizes the strategic importance of procurement) can ensure that procurement takes the reins on as many cost categories as possible.

Capabilities and culture

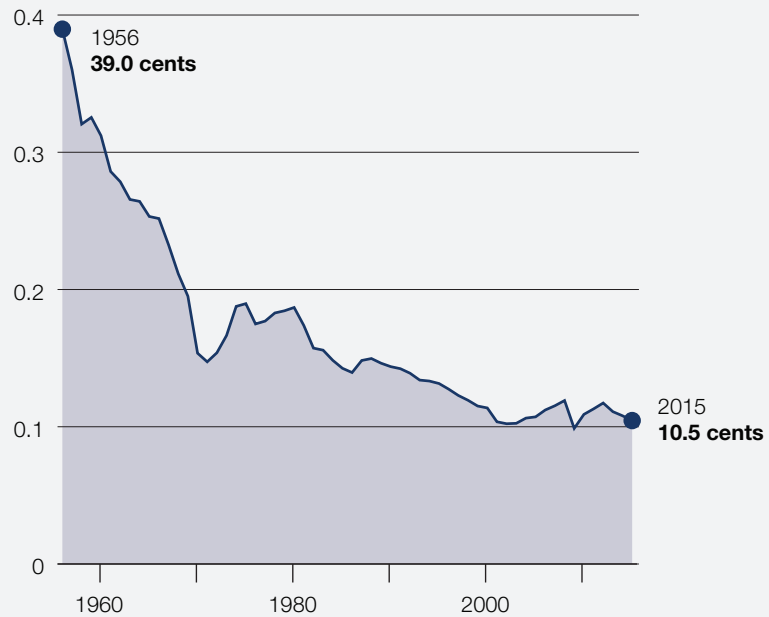
McKinsey's Global Procurement Excellence Survey has received responses from more than 1,000 procurement teams across industries. We have examined the relationship between procurement and financial performance. Our research consistently shows that of the four drivers mentioned earlier, it is capabilities and culture—people's skills and the values that bind them together—that matter the most (Exhibit 5).

But many airline procurement teams do not make the most of their people. Procurement is sometimes seen as a backwater in a career progression, when in fact it should be the opposite. Procurement offers broad exposure to key functions (such as airport operations, maintenance, marketing, network, service, and product development). What better place to train high-caliber talent and future executives?

Leaders of excellent procurement teams understand this. With a compelling value proposition, focused more on attitude than skill, they are able to attract and retain high-caliber individuals. They develop technical, functional, and leadership skills, using adult-learning principles. They know that capability building

Exhibit 4 Airline unit revenues are on a one-way trip.

Real revenue per available-seat-kilometer, 1959–2015,¹ \$



¹Nominal figures indexed to 2015 using US consumer price index for transportation.

Source: International Air Transport Association; International Civil Aviation Organization

Exhibit 5 People are the biggest factor in procurement excellence.

Derived importance of 4 procurement factors to financial performance,¹ %



¹Importance was derived from multiple regressions, and a partial least-squares optimization to solve multicollinearity issues we found in the multiple regression analyses. Financial performance was measured as annual procurement savings, annual reduction of cost of goods sold, and average margin of earnings before interest, taxes, depreciation, and amortization.

Source: McKinsey analysis

is a contact sport that can only succeed through practical experience. In these ways they build a team of spend entrepreneurs who take full ownership of costs, with a mind-set that they are spending their own money.

Category management and execution

Carriers that excel at purchasing make four essential moves in category management.

Proactively reshape the supply chain

The supplier base is often very small, with only one or two suppliers, as seen in catering at many airports. Sometimes it is quite large and fragmented, for example, in marketing partners. A key role of procurement is to open the aperture to find alternative suppliers and even foster their growth.

While procurement knows the importance of competitive bidding, resistance from other parts of the organization often limits the playing field. Some functions might feel it's too risky or cumbersome to change the existing supplier, or they might have a preferred supplier. Procurement's role is to develop credible new options. Leaders put considerable effort into a ceaseless investigation of new suppliers, turning over every rock, especially in low-cost countries. One carrier recently found new suppliers of crew uniforms and catering hardware in Asia with prices 40 percent lower than its onshore suppliers.

However, just lowering costs with new suppliers is not enough. Best-practice strategic sourcing means constant and proactive development of and innovation in the supply chain. A first step is to reduce the barriers to entry for potential suppliers in certain categories, such as ground handling. One carrier we worked with was unable to get the duopoly of suppliers at a key airport to lower their prices. A clean-sheet cost exercise revealed that its suppliers enjoyed very strong margins. But

suppliers were not willing to negotiate. To stimulate competition, the carrier then encouraged a new entrant into the airport by guaranteeing volumes from its business and that of alliance partners.

Airline supply chains are also susceptible to innovation. British Airways realized that catering is actually mostly a logistics operation; food preparation is important, but getting the food on time to where it needs to be is more so. It encouraged DHL to enter the market, and DHL now supplies all short-haul catering for British Airways at Heathrow Airport with food prepared away from the airport. Other airlines have shifted from suppliers with airport kitchens to a broader, more competitive, range of frozen-food options from outside the airport. Other amenities can also be innovated. One airline objected to the price charged by a monopoly lounge supplier. When negotiations failed, it partnered with an airside cafe for a segregated space and gave every business-class passenger a \$30 coupon. The lounge supplier quickly came back with a better offer.

Some airlines have gone a step further and, in effect, become their own suppliers. Delta Air Lines, for example, bought a refinery in "an innovative approach to managing (its) largest expense." It sees the refinery as "a means to hedge against (its) exposure to refining margins and to provide self-supply of its own jet fuel."¹

Use of alternative products is another way to challenge the status quo. A great example is spare parts, where some airlines continue to rely largely on OEMs. Leading airlines are trying new strategies, such as encouraging parts-manufacturer-approval (PMA) suppliers to develop new items, rewriting maintenance manuals on older aircraft to improve maintenance efficiency (while always maintaining highest safety), and

purchasing used aircraft for parts. Even the threat of bringing in PMA suppliers can influence OEM pricing. One airline we worked with created a display case of PMA parts in the lobby of its engineering building for all visiting OEMs to see.

Redesign to value

Designing to value—really understanding what matters to the passenger—can unlock significant cost savings and at the same time enhance the customer experience. Many carriers design to cost, which can indeed result in the lowest possible unit cost but can harm profitability, as revenue can be severely affected.

One carrier looked at the meals it offered and shifted to a “breakfast in a bag” delivered at the gate before boarding. This reduced preparation and logistic costs, freed up time of crew members, and allowed passengers freedom to choose when they would have their meal, reducing costs and improving satisfaction.

Qantas recently redesigned its economy-class meal. Out went multiple small dishes on a plastic tray, replaced by a single, larger, simple main dish on a plate. This reduced supply-chain costs and sped up service. Out went small packs of butter, over half of which were never opened, and in came “butter-infused rolls” placed on top of the main dish. Much of the savings were plowed back into the quality and size of the meal. Another carrier engaged its catering suppliers early in the product specification and design. By allowing its catering provider greater scope in setting menus, it could design better food at lower cost.

Design to value is applicable to a large share of the spend base. However, most airlines do not have a systematic approach to design to value. Airlines need to study customers in depth, brainstorm with supply-chain partners, and, most important, make

difficult trade-off decisions. Procurement must play a key role in the design-to-value process, as it is uniquely positioned to understand supply alternatives and to counterbalance and challenge the product and service functions that typically want the best of everything.

Don't take tariffs at face value

Airports and other suppliers routinely publish pricing schedules. Such schedules imply that prices are fixed and firm. Yet some airlines successfully negotiate discounts, rebates, and other benefits, such as a marketing budget.

Airport fees are surprisingly flexible. Most airports are looking to improve their connectivity and volumes. Airlines can look for win-win situations (by arriving at off-peak times, for example). Optimally, a carrier can present to the airport a credible threat of shifting some of its business to other airports. In its negotiations to establish a location for a new Asian carrier, Qantas developed credible plans for a hub of operations in Bangkok, Ho Chi Minh City, Kuala Lumpur, and Singapore. Ryanair is famous for demanding marketing budgets or lower airport fees in return for starting service. Brussels South Charleroi Airport paid Ryanair up to €3.5 million annually through a series of rebates in exchange for setting up a hub. It also actively moves flights to airports that offer lower landing and parking fees. From 2007 to 2012, Ryanair reduced passengers at London Stansted Airport from 15.0 million to 13.2 million. Once a new deal with lower charges was agreed with Stansted in 2013, Ryanair agreed to expand passenger volumes by 50 percent over ten years.

Airports can help others in the supply chain to provide incentives for a new service, such as influencing ground handlers and caterers. Even navigation fees can sometimes be negotiated. Some air routes offer choices to overfly certain

airports; carriers can use the incentive of shifting volume to win lower fees.

Consider total cost of ownership over the lifetime

The basic principle of total cost of ownership (TCO) is straightforward: airlines should not opt for the choice with the lowest immediate capital expenditures, but should rather go for the lowest net present value of all long-term costs. Yet carriers do not always stick to this rule. Aircraft is the standout category. Worldwide, more than 50 percent of all aircraft today are leased. And while there are many valid justifications for leasing—including immediate availability, flexibility to return the aircraft at the end of the lease, and tax benefits—the decision to lease cannot be made lightly. Procurement needs to look carefully at the lifetime cost—the TCO. In our experience, the premium paid to aircraft lessors is high and often exceeds the benefits.

Similarly, many carriers have opted to outsource engine maintenance to third parties, using long-term “power by the hour” contracts. Procurement teams need to carefully study the lifetime costs of such contracts, while also pricing in the security and lower risk that maintenance contracts provide.

One airline saved significant fuel cost through some initial capital expenditures. At its hub airport, it built its own tank farm and worked with the airport to install fueling lines under the apron. That meant it could greatly reduce the fleet of tanker trucks it used, saving considerable operations expenses over the long run.

IT is another category with potential. Providers of IT services such as global distribution services (GDS) and passenger service systems (PSS) charge small amounts per transaction. Airlines have been attracted to that charging model, in part because it saves them from significant upfront investment. However, over the long term these small fees add

up. Some leading carriers are pushing their IT providers to use a licensing model, and a few are even building their own systems.

Structure and systems

Three organizational moves distinguish the carriers that are best at procurement.

Maximize procurement's mandate without leaving users behind

The traditional organizational debate of centralization versus decentralization does not worry purchasing leaders. Rather, they think through the question of who might be the best or natural owner of a category and conclude that procurement is the natural owner of about 70 to 90 percent of the airline's spending (Exhibit 6). For each category, they carefully define the roles of procurement and users, to ensure procurement has the necessary control and considers relevant input and needs from users. This paves the way for critical cross-functional collaboration.

Separate strategic from tactical

Purchasing leaders create strategic roles (such as category managers) that drive sourcing excellence. Tactical activities in the procure-to-pay (P2P) process are handled by others. This allows high-caliber talent to apply their skills where the return on investment is highest.

As an example, one airline created a strategic sourcing function, separated from supply-chain management. The strategic sourcing function drove the end-to-end sourcing process from demand optimization and sourcing-strategy definition to negotiation and supplier management.

Get digital

While our research shows that people are the main driver of value, systems are not far behind, and digital innovations can drive procurement value.

Exhibit 6 Procurement should control 70 to 90 percent of total spending.

| Procurement's role | Categories included | Portion of all spend at a typical carrier, % |
|---|--|--|
| Cross-functional approach Cross-functional teams select and negotiate with suppliers Procurement involvement High | Nontechnical <ul style="list-style-type: none"> • Catering • Marketing • Professional services • Ground handling • Contact center • Operations handling <ul style="list-style-type: none"> • IT • Security/passenger services • Insurance • Uniforms • Ground equipment Technical <ul style="list-style-type: none"> • Airframe (eg, in-flight entertainment, seats) • Repair services • Consumables • Rotables • Fuel | 65 |
| Procurement-leveraged approach Procurement leads the strategy, involving users only when necessary Procurement involvement High | Nontechnical <ul style="list-style-type: none"> • Infrastructure • Transport • Hotels and allowances • Commercial systems • Catering (administration) • Telecommunications <ul style="list-style-type: none"> • Security • Training • IT labor • Cleaning • Prints and paperwork | 20 |
| User-driven approach Users lead the effort, supported by procurement as required Procurement involvement Medium | Nontechnical <ul style="list-style-type: none"> • Rent and Infrastructure (airports) | 15 |

Source: McKinsey analysis

All airlines should have a digitized procurement system: a work flow for all purchases, a portal for suppliers, a P2P process for payments, and tools for spend analysis (Exhibit 7). Leaders go further, holding e-auctions for commodity categories and building platforms to collaborate with suppliers on performance management.

Making it happen

Leading carriers tend to use three steps in their approach to improving procurement

performance (Exhibit 8). They begin by framing the challenge and assessing the opportunities, including identifying likely categories for improvement. They take some time to plan their attack and then go after the chosen categories in “waves”—concerted efforts that deploy a wide range of tools and databases. All the while, they build capabilities on the procurement team.

The first and third steps are critical and merit further explanation. To frame the challenge,

Exhibit 7 There are 12 digital tools for procurement.



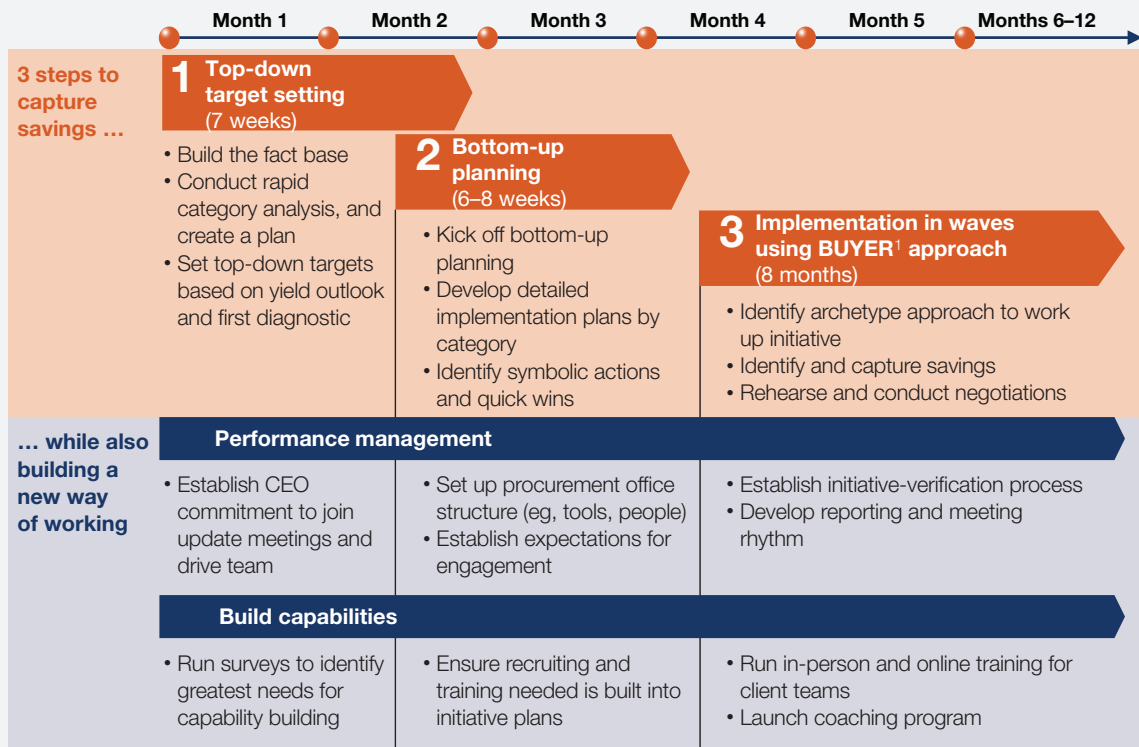
Source: McKinsey analysis

carriers should consider the likely yield evolution in the market, the margins the company aspires to, and the resulting target cost base. McKinsey's Operational Excellence Survey and other diagnostic tools can help assess current performance of the function.

To drive improvement in the chosen categories, carriers can use an approach we call BUYER, for build, understand, yield, execute, and review (Exhibit 9).

A carrier can begin a wave by building the right joint team with the business unit and procurement for the category. It can then analyze the market dynamics for the category, with particular focus on finding potential new suppliers. It should develop a sourcing strategy for the category, including changes to demand. In execution, a back-office war room can support the negotiations with analysis and advice. Finally, it can create new scorecards to measure supplier performance and tools to monitor and manage it over time.

Exhibit 8 A sample work plan shows how to transform procurement.



¹Build, understand, yield, execute, and review.

While the carrier conducts its category waves, it can also build long-lasting capabilities for performance, using tailor-made curriculums, formats, and delivery modes. A good start is to diagnose the capabilities both on an organizational level and individual level. The carrier can then help procurement team members learn the essential skills in the BUYER approach in parallel with the actual category execution.

Building capabilities for performance can create a rapid and significant uptick in capabilities in a short time; in less than a year, carriers can

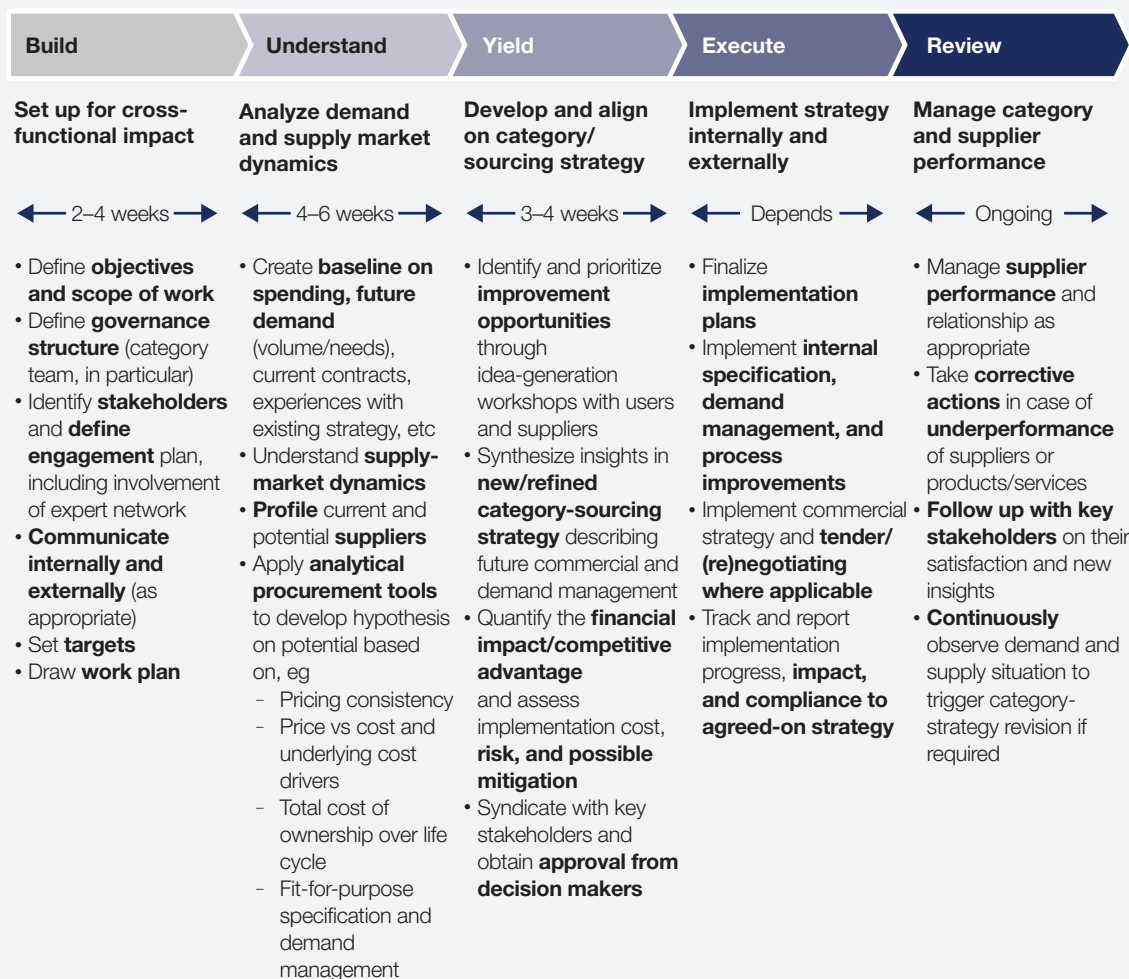
expect to see a step change in the procurement team's capabilities. The result is higher and more sustainable financial impact.

A case example

A leading Americas carrier needed to rapidly restore profitability to historical levels. The airline's leadership defined a comprehensive set of commercial and operational themes, including the transformation of procurement.

The carrier started with a top-down diagnostic of spend and organization to understand

Exhibit 9 The BUYER approach generates savings, category by category.



Source: McKinsey analysis

opportunities and prioritize initiatives, design the program, and set targets. It then ran multiple waves of the BUYER process, category by category, addressing close to 100 percent of nonfuel spend (fuel had been separately addressed a few years earlier). Across all waves, the carrier achieved average savings of more than 10 percent.

Just as important, the carrier completely overhauled its organization, bringing more than 80 percent of its spend under the control of procurement. It also created a strategic sourcing organization while at the same time reducing the size of the organization.



Airlines must continue to reduce costs. A high-performing procurement team, with the right approach, helps drive down costs while improving internal and passenger satisfaction.

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¹ "Delta partners with leaders in the energy industry to drive fuel savings," April 30, 2012, delta.com; "Motley Fool: Delta refinery doing just what it was supposed to do," September 1, 2015, delta.com.

