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Make or buy

Three pillars of sound decision making

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Executive summary

The decision to make or buy extends beyond manufacturing, encompassing human resources, information technology, maintenance, and other fundamental business functions. Chief procurement officers have a key role to play in helping business units make these decisions given the skills and objective perspective their teams bring to the effort. This report explores the dynamics of make-or-buy decisions and presents a framework to help companies make the right decisions. The framework is built on three key pillars — business strategy, risks, and economic factors.

Make-or-buy decisions in context

As Western companies come under increasing pressure to cut expenses and improve their return on assets, the dilemma of whether to keep key functions in-house or outsource them has taken center stage. Manufacturing units are identified most often with “make or buy” decisions because third-party suppliers in Eastern Europe, China, and other low-cost regions hold out the promise of significant advantages that many brownfield plants in developed nations can’t offer. But other critical activities — such as human resources, information technology, maintenance, and customer relations — can gain (or lose) just as much from outsourcing and shouldn’t be neglected when the options are considered.

What does this mean for chief procurement officers? CPOs can and should lead business units in conducting detailed analyses that thoroughly evaluate the costs, benefits, risks, and rewards of outsourcing and the implications of keeping the activity in-house.

Before giving up on in-house operations, a company must objectively assess its core competencies and measure them against world-class standards. CPOs, with their proficiency in overseeing and managing third-party suppliers to generate the highest possible level of quality and productivity, know the right questions to ask to make these determinations. Among them: If our manufacturing or HR capabilities are below global benchmarks, can they be improved to reach maximum performance and efficiency, and would the benefits of those capabilities surpass the benefits that we would obtain from outsourcing? If so, what resources are required, and how long would it take to reach noticeably improved performance? Are technology innovation and alignment necessary for us to have a competitive edge? Do our customers expect a high level of service and response, much greater than we could offer if we outsourced call centers to, say, India?

If, after these questions are answered, outsourcing is chosen, CPOs can work with the business unit to find the right partner. Pivotal indicators such as business strategies, manufacturing and engineering capabilities,

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design and innovation skills, labor costs, staff skills, employee training programs, the ability to scale, capacity utilization, and the social policies of the potential partner must be assessed. In addition, the risks in outsourcing must be accurately gauged, whether they relate to the supply chain or to proprietary technology and intellectual property.

CPOs can also help structure outsourcing deals to protect their companies from quality, delivery, and other material failures. Lessons learned from procurement — for example, the importance of maintaining the right balance between collaboration and competition — are similar to those that must be applied to outsourcing arrangements, in which the perceived value of the relationship may cloud people's initial judgment and lead to serious problems a few years later.

Because they have no direct management responsibility over departments that may be considering outsourcing, CPOs can produce an unbiased "right-sourcing" evaluation that takes into account all the possible consequences — economic, human, and technological — of outsourcing or maintaining internal operations. This is an extremely important task because too often these choices are based on precedent and poor or incomplete analysis. Keeping the process in-house is typically preferred only because the capability and capacity already exist internally. And outsourcing is frequently an emotional response, a way to avoid fixing processes that have become inefficient and flabby but whose true potential is not completely understood. In other words, outsourcing may be a poor alternative to confronting internal inefficiencies and, in the process, improving company performance.

Faced with this level of inertia, CPOs must challenge their organizations to make more objective and informed make-or-buy decisions. Indeed, it is the responsibility of CPOs to ensure that all the right trade-offs have been evaluated and all the possibilities have been considered. This is far from their typical position: Procurement officers, if they are involved in these choices at all, are usually brought in after high-level deliberations, not during them.

Strategy& has developed a framework to help simplify the decision. It is built on three key pillars: business strategy, risks, and economic factors (*see Exhibit 1, next page*).

Exhibit 1
Weighing the make-or-buy decision

	Make (in-house)	Pillars	Buy (outsource)
Business strategy	In-house process differentiates the product or service Capability has synergies across the business Supply market is hostile or controlled by competitors Need to "push the technology or capability envelope"	Attractiveness of the process/business Criticality for overall business success · Proprietary processes · Product differentiation Industry dynamics and competitive positioning Dynamics of the technology or capability · Rate of change · Risk to core capabilities	Process/business is unattractive (e.g., hard to find workers, strict regulatory environment) Materials or processes are not critical to end products or marketing efforts Supply market is suitable for building close partnerships Suppliers are willing and able to meet innovation needs
Risks	Few or no alternative sources of supply High supply market risks Imperative to couple supply and usage (real-time/short lead time) for quick response or quality Sensitive intellectual property involved in process/product	Holdup risks Availability of alternative sources and switching costs Supply market risks (if foreign-sourced) · Political stability · Exchange rate volatility Transportation risks · Lead times · Supply disruptions Intellectual property protection	Holdup risk is low or sufficiently managed through contract of broader business relationship Low switching costs and easily accessible alternative sources of supply Uncoupling the supply chain has little impact No sensitive intellectual property involved
Economic factors	Internal cost advantage or cost parity, high quality Significant recent investment in process technology that cannot be recovered Investments meet required return on invested capital Company has strong, defensible skills base	Relative economic and operating performance advantage · Scale and utilization · Efficiency · Reliability · Factor costs · Quality Capital requirements and financial returns Level of skills and expertise	Suppliers have lower costs or better quality Major new investments are required Suppliers have lower ROI targets Insufficient or weak in-house skills/capabilities; skills are difficult to acquire

Source: Strategy&

Pillar 1: Business strategy

Business strategy includes the strategic importance to the company of the product or service that is being considered for outsourcing, as well as the process, technologies, or skills required to make the product or deliver the service. These factors must be considered not merely in light of the current competitive environment but also in anticipation of how that environment might change in the future.

As a rule, it's desirable to choose in-house capabilities when a product or a function is critical to a company's performance or is considered a core operation. For instance, if a product is time-sensitive or prone to frequent design changes, third-party manufacturing would likely be a mistake. Conversely, outsourcing tends to be a good choice when companies are seeking to:

- Eliminate the burden of capital- or labor-intensive processes on the balance sheet
- Reduce costs
- Gain flexibility to adjust output in response to changing demand
- Phase out management of paperwork or training
- Supervise fewer workers
- Gain access to new process or network technologies
- Leverage external expertise

Milwaukee-based Harley-Davidson Inc. illustrates the importance of business strategy in determining whether to make a product or buy it from a third party. The motorcycle company continues to thrive, in part because of its decision to manufacture mostly in-house in the United States. Harley-Davidson's "Made in America" brand image is so strong today that consumers don't care if the company's motorcycle accessories and ancillary merchandise such as clothing are produced overseas by outsourcers; those operations are peripheral to the brand image of Harley-Davidson's primary products. (Ironically, when the German beer maker Löwenbräu licensed North American production to another Milwaukee-based business — Miller Brewing Company — in the mid-1970s, Löwenbräu's attractiveness to U.S. customers fell because the product no longer had the cachet of a genuine German beer.)

The CPO could lead the discussion among senior management aimed at resolving which aspects of the organization rise to such a level of strategic importance that they must not be outsourced. Strategic value can be a subtle thing. For instance, if a product is based on proprietary technology or hard-won and coveted intellectual property, outsourcing

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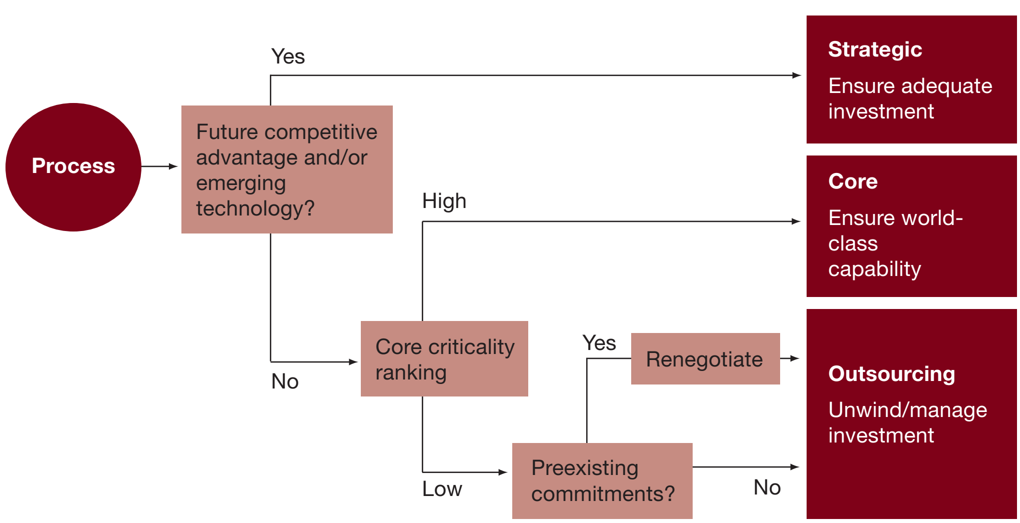
is probably not a good idea. Ethical concerns also merit consideration. A company's reputation can be seriously harmed if the company is connected to unsavory activities such as sweatshop production, child labor, or environmentally damaging manufacturing techniques — all of which are routine at some outsourcers. *Exhibit 2* outlines the beginning of the process in which the strategic value of the services and manufacturing processes under consideration for outsourcing can be sorted into their respective categories: strategic, core, and outsourcing candidates.

Of course, outsourcing is worth considering under certain conditions. If a product or function has essentially become a commodity or is derived from factors other than unique or differentiating capabilities, and the possibility of moving production or management to a third party does not give rise to significant risk to the company's strategy, outsourcing could be the perfect solution.

Moreover, when outsourcing is called for, CPOs can use their knowledge of the supply base to compare potential outsourcers' technologies, product development and supply chain management capabilities, and ability to work in partnership. And a CPO can evaluate whether his or

Exhibit 2
Identifying strategic, core, and outsourcing potential



Source: Strategy&

her own company has the skills and resources needed to manage outsourcers so they make continuous quality and cost improvements over the life of the contract. Without that, the outsourcing arrangement will probably deliver disappointing results.

Pillar 2: Risks

Risks include lower quality, reliability, and predictability of outsourced solutions as compared with in-house manufacturing or services, as well as risks inherent in the process of identifying and selecting the right supplier and structuring a workable ongoing relationship.

The CPO has multiple roles to play in managing risk. He or she should encourage the organization to view the supply chain or service providers as partners that deliver an entire product or manage an entire function. The CPO must also oversee risk assessment during a make-or-buy evaluation with much more diligence than would be necessary in traditional sourcing. Also, the CPO should supervise the writing of the contract so that it protects the organization from the outsourcer's deficiencies.

When there are multiple suppliers, a single failure in the chain may not be fatal. And when suppliers are making components rather than finished products, manufacturing errors will likely be caught during assembly and not be passed on to the consumer directly. But because outsourcing introduces such a wide array of new risks, CPOs must be keenly aware of any potential pitfalls with suppliers, and evaluate outsourcing partners on the basis of their importance to the organization. Failure of service could be devastating in an outsourced critical operation, such as an IT network, a payroll processing system, or component manufacturing, whereas a glitch in a training program or a long-term product development plan would be much less of a problem.

It is rare for companies to hire multiple outsourcers for the same service, but the General Motors Corporation did just that in 2006 in a highly publicized decision, primarily to minimize risk. Though some critics warned that it would be a management headache, the automaker split its US$15 billion contract for IT services among Capgemini, Covisint, EDS, Hewlett-Packard, IBM, and Wipro.

As it turns out, GM has benefited from the strategy in a number of ways. First, multiple suppliers encourage competition, minimizing the chances that the contract's cost competitiveness will decrease over time. Second, system failures at any of the companies will not harm GM's entire IT infrastructure. Third, as opposed to the 10-year term of GM's prior IT arrangements, the contracts are for only five years, which limits the automaker's long-term financial risk and ensures accountability from the outsourcers.

In addition, GM and the IT suppliers jointly developed standardized approaches for all five companies to follow — involving matters as varied as systems delivery and supplier interactions with the automaker — aimed at producing greater efficiency in the IT services provided.

Crucial to the mitigation of risk is the supplier selection process. It must be based on a clear understanding of the supplier's strategy, operations, and cost structure. Choosing the lowest bid is not sufficient. Only a supplier that has a compatible business strategy and will maintain an advantaged cost position over time can offer competitive prices in the long term.

Outsourcing a broken process — for instance, a human resources benefits call center that is not equipped with the right answers to the most prevalent questions — will end up costing much more than it would if the function were fixed before being handed off to a third-party provider. The outsourcer will likely charge a significant amount to repair the process, and as an outside operation it will probably not know enough about the organization's needs to repair it properly.

The financial health of the outsourcer must be considered as well. Will the company still be in business in a year? In five years? And is the company too dependent on this outsourcing contract for its survival? CPOs regularly assess all these issues in putting together contracts.

Understanding the risks associated with the location of an external supplier is equally important. Besides gauging the source country's political stability, companies need to assess the safety and lead times of transport arrangements. They must also identify and evaluate potential secondary carriers or routes, or find backup suppliers in a different region that can provide incremental volume during peaks in demand or disruptions of the primary source of supply.

Supply chain management is a highly complex function, especially when combined with outsourced manufacturing of products or outsourced processes that require unique capabilities or assets and thus are difficult or expensive to re-source. But even these "holdup" risks — that is, risks that a supplier will exploit a customer's highly dependent relationship by raising prices or demanding better terms — can often be managed with external solutions. It is critical, however, to consider the options and determine the best alternatives before any commitments are made with a supplier, because outsourcing contracts can be difficult to amend or break (*see Exhibit 3, next page*).

Exhibit 3
Managing holdup risks

Option	Advantages	Disadvantages
Control production through direct ownership or joint venture	Highest level of control over operations	Capital requirements Management efforts
Have multiple suppliers for each product or service with significant holdup potential	Potential backup for contingencies Strong competition Easy supplier assessment/ comparison	Higher cost through redundant operations, lower volume with each supplier Potential for inconsistent quality More supplier coordination/ management required
Select only one supplier for each product or service, but split overall volume among suppliers to stimulate competition	No capital requirements Competition through prospects of gaining future/ additional business	Need enough products or services with similar capability requirements to split total volume among suppliers Potential loss of economies of scale if volume is small and suppliers cannot leverage additional volume
Create situation with similar incentives for customer, original equipment manufacturer, and supplier	No capital requirements Truly strategic partnership Partner's interest in long-term success keeps total costs	No alternatives/backup for contingencies May require close-to-exclusive relationship and thus loss of scale Supplier may charge premium for possible exclusivity agreement

Source: Strategy&

Pillar 3: Economic factors

The economic factors include the impact of outsourcing on capital expenditures, return on invested capital, and return on assets, as well as the possible savings achieved through outsourcing.

The CPO's primary focus should be to shift the discussion from the price of a finished product to the overall cost of providing the product or service. To do that, he or she must identify the supplier's cost drivers and design a pricing mechanism that reflects the current underlying costs and how the costs might change in the future. The goal is to make sure that ongoing improvements in cost are covered in the contract and are shared between the outsourcer and the CPO's organization. It is important to find an effective gain-sharing mechanism that properly rewards the supplier for taking action but passes the ongoing improvements on to the buyer. Sometimes this requires placing staff at the outsourcer's headquarters to encourage and monitor continuous improvement.

To understand how critical appropriate pricing mechanisms are, consider that most companies base the decision on whether to outsource solely on estimates of the in-house versus the external costs associated with the outsourced operation — that is, the price of each piece made or the cost of running an HR department or an IT network — rather than on the total costs.

Among the total costs that must be considered are the outlays for managing the outsource provider, especially as the outsourced process changes. These can be significant. For example, software customization on a third-party information technology network can add a huge surcharge to the outsourcing deal. Handling the customization in-house, where the IT department can work closely and more productively with end-users to meet their needs, might be much less costly.

In addition, when outsourcing partners are not chosen properly, organizations frequently attempt to protect themselves from failures or delays by duplicating in-house some of the effort that was originally farmed out. This results in multiple costs for the same project, potential expenses that are often not considered when the outsourcing deal is made. The costs that are most frequently ignored in outsourcing manufacturing operations:

- Shipping and handling
- Expanded inventories
- Administrative expenses, such as supplier management and quality control
- Added complexity and its impact on lean flows
- Lower return on invested capital
- Production reliability and quality control

Considering all this, relying on a one-time quote to gauge the competitiveness of an external supplier is generally not sufficient. Chief procurement officers can save their companies from this mistake by factoring into the outsourcing equation the economic effects of relative wage rates, labor productivity, equipment and staff utilization, the leanness of both the labor base and functional processes, the capacity for process and product innovation, and relative purchasing power.

Possible top-line gains from keeping production in-house must be calculated as well. In choosing not to outsource, some companies have enjoyed significant revenue growth by taking advantage of the speed and quality of internal innovation cycles, the ability to deliver customized products to nearby consumers quickly and with little advance planning, and the possibility of leveraging new lines of business from a favored supplier's proposal.

Expectations must be clearly articulated so the company can avoid unpleasant surprises once the supplier feels the business is locked in or thinks that its current performance will be sufficient in the future. It is vital to provide up front the appropriate specifications and current and future deadlines, to the extent that they are known. Any misunderstanding about the scope of the outsourcing program will surely be costly and damaging to an organization.

The contract must reflect how the business will unfold rather than its state at the signing of the agreement. In outsourcing, CPOs must be vigilant about creating a customized contract rather than simply offering the standard terms and conditions.

A successful outsourcing relationship often includes the sharing of savings from productivity improvements, so that both parties have an incentive to collaborate. During the course of the relationship, it is also important to find the right balance between fully transparent supplier operations and micromanagement, or the perception of it.

Once the outsourcing decision has been made and suppliers have been selected, it is essential to agree up front on a fair and balanced pricing mechanism, productivity improvement and cost reduction expectations, and the required degree of responsiveness to design, service, or delivery changes.

Outsourcing contract terms span multiple years; five- and 10-year agreements are not uncommon. During that term, however, business conditions frequently change, resulting in significant modifications in what is required from the outsourcer. For example, production rates may need to be increased or decreased depending on the market performance of the products. A hike in volume is apt to reduce production costs because it allows the outsourcer to put excess capacity to work. Unless this benefit is shared fairly between outsourcing partners, the venture often deteriorates; after all, why should the outsourcer alone gain from improved market conditions? Similarly, should volume requirements fall, the outsourcer's production costs are likely to rise; that increase, too, should be shared. In the short term, outsourcing relationships can normally survive imbalances, but for the partnership to endure for a long time, the contract must provide a fair mechanism for considering the cost implications of any major changes.

Conclusion

As demonstrated by the variety of factors and risks that need to be taken into account in the three pillars, the decision of in-house versus outsource should not be made without careful analysis. The CPO is essential to making sure that this analysis is initiated and conducted diligently and objectively. This will put some strain on CPOs and their organizations, and new capabilities will be required. But by viewing the process as a logical extension of the procurement role, both the CPO and the purchasing department will be able to handle the new responsibilities with a high level of skill.

Although the choice to keep an activity in-house or use an outsourcer may be cross-functional and strategic, it is the role of the CPO and the procurement function to make any outsourcing decision work. Consequently, purchasing executives should not be passive about making sure that their input is clearly articulated.

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Endnote

Editor's note: This report has been adapted from "Make or Buy: Three Pillars of Sound Decision Making," published in *Sourcing Reloaded: Targeting Procurement's New Strategic Agenda* (Strategy&, 2008).

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