This White Paper presents the case for a ‘paradigm shift’ in current thinking about how to undertake category management and develop sourcing strategies. The case for such a radical reappraisal is based on the growing evidence of a mismatch between currently dominant academic and consulting methodologies and the reality of professional managerial practice. An alternative approach, Sourcing Portfolio Analysis, is outlined, with a supporting case study on the scope for collaboration in leverage power scenarios that demonstrates the utility of this approach.

A. Issues with Current Category Management and Strategic Sourcing Methodologies

In the last 30 years the most commonly used methodology for undertaking category management and developing sourcing strategies has been Purchasing Portfolio Analysis (Kraljic, 1983). More recently, AT Kearney have developed an adaption of this methodology known as The Purchasing Chessboard (Schuh et al., 2008).

While there are significant analytical differences between these two approaches, they essentially operate with the same conceptual paradigm when making recommendations about how managers should develop sourcing strategies and tactics. In what follows a brief summary is provided of some of the key weaknesses recently identified in the analytic rigour and logic of these two methodologies (Cox, 2014).

Purchasing Portfolio Analysis

This approach to category management and strategic sourcing (see Figure 1) recommends managers to analyse Supply Market Complexity (High/Low) and then the Importance of the Purchased Item (High/Low) in order to identify alternative sourcing strategies and tactics.

Since the 1980s this approach has been the technique most commonly recommended to guide managerial action (Booth, 2010; Carter, 2006; Cousins et al., 2008; Flynn, 2006; Lysons and Farrington, 2012; Monczka et al., 2005; O’Brien, 2009; Van Weele, 2009).

This methodology recommends four basic sourcing strategies depending on the category segmentation:

- Strategic – Develop Long-Term Collaborative Relationships
- Leverage – Regularly Market Test and Bid Volumes
- Bottleneck – Assure Supply
- Non-Critical – Reduce Transaction Costs

To assist with effective implementation, each of the four strategies is supported by between 8 to 14 tactics. Once a particular supplier, or suppliers, have been identified the methodology also recommends that the power balance between them be understood, so that buyers can use one of three negotiation strategies (Diversify, Balance or Exploit).
Despite the centrality of this approach since the 1980s, in a study of 122 companies in 16 industrial sectors it was shown that very few organisations were even aware of the Purchasing Portfolio Analysis methodology (Cox et al., 2005). Similarly, when working closely with managers it is apparent that very few of those using this methodology slavishly follow its dictates. In practice managers often ‘cherry-pick’. This means that they adopt and/or adapt any of the strategies and tactics recommended within the four-box methodology to suit themselves, irrespective of what the methodology recommends they should do.

It follows, therefore, that there is a major disconnect between theory and practice. More worrying, however, is the evidence of ‘cherry-picking’. If this occurs then managers are either pursuing strategies that are ‘theoretically wrong’ (that should in practice lead to sub-optimal outcomes), or the theory and methodology itself is wrong. This is because it does not provide logically coherent practical guidance for managers to use. It is our view at the International Institute for Advanced Purchasing & Supply (IIAPS) that the fault is with the theory rather than with managerial practice. This is because this approach, while having some solid foundations (such as an embryonic power positioning methodology), is based on a faulty analytic logic that results in inappropriate recommendations for action.

Given limited space only a few examples can be presented of this faulty logic and lack of rigour and robustness, a more detailed discussion is provided in Sourcing Portfolio Analysis (Cox, 2014). The major gaps in analytic rigour identified in the Kraljic methodology include the following:

**A simplistic analysis of category value**

By focusing only on High or Low Importance of Purchased Item a simplistic understanding of category value is created. Furthermore, in practice managers tend to see this as a euphemism for the KPI by which the Procurement Function is currently measured (cost savings), and not what is critically important to the organisation strategically (value for money from supply). This has resulted in a focus on cost reduction and tactical spend management rather than value for money trade-offs and strategic supply management (Cox and Ireland, 2015).

**Limited analysis of evaluation criteria for supply market complexity**

The analysis of evaluation criteria for understanding Supply Market Complexity (and therefore potential opportunities and risks) is underdeveloped. The methodology is overly reliant on the early work of Michael Porter (1979, 1980), and while it identifies six criteria for analysis, it fails to accommodate recent developments in the analysis of structural market dynamics, or the critically important recent insights into information asymmetry by behavioural economists. This leads to an overly-simplistic analysis of the complexity of the supply market to be managed.

**Erroneous focus on supply market complexity rather than buyer and supplier exchange**

Perhaps the gravest error is the analytical focus on Supply Market Complexity itself. This is because buyers have sourcing relationships with suppliers, and not with supply markets per se. In practice, if a buyer selects one or many suppliers to market test then this is the ‘supply market’ that they are choosing to source from. While the overall competitive forces within a supply market may impact the strategies of a buyer and its suppliers, it is the actual and/or perceived power balance between the specific buyer and the suppliers actually chosen for a market test that should be the primary focus of analysis, rather than the general supply market that is not directly involved in the relationship.

Arguably, this type of analysis can only be achieved using positioning techniques that focus on the relative dyadic power and leverage between the buyer and each potential and/or actual supplier. This is because the power and leverage positions of specific suppliers can vary widely with a particular buyer in a supply market.

**Lack of comprehensive identification of buyer and supplier power and leverage scenarios**

The methodology does provide an embryonic identification of nine power positions and three negotiation strategies, but this analysis is not fully comprehensive. Only six primary and 20 subsidiary evaluation criteria are identified for determining buyer strengths without any methodology provided to explain how to utilise the criteria as part of the power positioning methodology. The weakness of this approach is shown by the fact that IIAPS has identified well over 100 evaluation criteria to determine buyer and supplier power positions (Cox, 2014).

This lacunae leads ultimately, as briefly outlined below, to a lack of robustness in specifying buyer and supplier power scenarios and inappropriateness in many of the sourcing strategy recommendations made.

**Limited range of strategic sourcing options and tactical levers identified**

The methodology identifies only four sourcing strategies with a limited number of tactics, yet other positioning methodologies have identified four strategies and up to 64 methods/tactics (see below and Schuh et al., 2008); and, IIAPS works with 32 strategies and over 100 tactics (see below and Cox, 2014).

**Inappropriate and/or misguided strategic sourcing recommendations**

One of the major problems with all positioning methodologies is the desire to provide specific strategies and tactics for particular segmentation positions. This desire often leads to an over-simplification of the complex choices that managers must make, and a failure to provide them with all of the strategic and tactical options that are potentially avail-
able given the circumstance in which they find themselves. One simple example reveals this issue.

Purchasing Portfolio Analysis contends that long-term collaborative relationships should be used in the Strategic quadrant. Unfortunately, this recommendation is based on a faulty logic. If a buyer has a long-term need for any supply item entering into longer-term relationships is always an option. This means that collaborative ways of working are always potential options in many other quadrants. Indeed there is considerable evidence that best practice in collaboration often occurs in the Leverage quadrant (Shimizu, 1996; Cox and Chickens, 2008).

It is also worth stressing that recommending collaboration in the Strategic quadrant is itself highly questionable. This is because the worst position for a buyer to be in is to have to source a strategically important supply requirement from a dominant monopolist supplier. It is not clear why such a dominant supplier should want to collaborate and pass more value to a buyer. Arguably, the potential strategic and tactical choices available to suppliers are much more complex than this, and adopting strategies that create increased competition should always be the first requirement in the Strategic scenario, rather than the collaborative one identified.

Incoherence in exclusivity of tactical levers
The methodology also oversimplifies the choices for managers when identifying particular tactics to be used within each of the four positioning scenarios, because many of the tactics identified can be used just as effectively in all four of them. This issue is clear in the Strategic quadrant where the main tactics identified for buyers are as follows:

- accurate demand forecasting;
- detailed market research;
- development of long-term supply relationships with established global suppliers;
- make or buy decisions;
- contract staggering;
- risk analysis;
- contingency planning;
- logistics, inventory and vendor control;
- highly detailed market data;
- long-term supply/demand trends;
- good competitive intelligence; and,
- industry cost curves.

It can be argued, however, that most, if not all, of the tactics above are just as relevant for the effective management of any category as they are to those characterised by High Purchasing Importance and High Supply Market Complexity. This is because most of these tactics are essential elements of the effective management of ALL supply relationships. There are similar problems about a lack of uniqueness for many of the tactics identified by this methodology in the other three quadrants of the positioning matrix.

If the Purchasing Portfolio Analysis positioning methodology is neither fully rigorous analytically, nor fully robust in its recommendations for action, then it is inevitable that it will lead to potential sourcing errors by those using it, or to cherry-picking. A similar problem of logical incoherence with options and recommendations can be found in The Purchasing Chessboard (Schuh et al., 2009).

The Purchasing Chessboard
This methodology is an attempt to create a more sophisticated positioning approach that uses the four power positions identified in The Power Matrix (Cox, 2001a, b, c; Cox et al., 2000, 2002) and outlined below in Figure 2.

Unfortunately, as Figure 3 shows, the methodology then recommends the same four sourcing strategies as in Purchasing Portfolio Analysis, each with four unique approaches and 16 tactical levers, or 64 overall methods in total for reducing costs.

Unfortunately, while all of the 64 methods described are undoubtedly tactical levers that a buyer might use with suppliers, there are serious problems with these positioning recommendations. The single major error in the logic of this approach is that the authors do not appear to understand that the Power Matrix was developed as a critique of the Purchasing Portfolio Analysis approach and its recommen-
statics for action (Cox et al., 2003, 2004). In particular the authors of the Power Matrix argued that collaboration is a feasible option in at least three of the power positions and not, as argued in Purchasing Portfolio Analysis, in just one.

As a result, The Purchasing Chessboard makes the same errors of logic inherent in Purchasing Portfolio Analysis, and there are a number of additional weaknesses. These include:

- the power resources that are identified to guide positioning are extremely limited and never fully clarified; and,
- the importance of specific power resources for particular sourcing selection decisions is never explained.

This means that the analytic rigour of this methodology is in serious doubt, and there are fundamental issues with the recommendations of methods to be used in each of the four basic sourcing strategies. This is because few of the 64 methods recommended in Figure 4 are unique to a particular sourcing strategy, and they are often feasible options in more than one power scenario, as the analysis below indicates.

**Static, Non-Dynamic Logic**

Although the need to change (Diversify) power circumstances is discussed briefly in Purchasing Portfolio Analysis the overall thrust of this, and The Purchasing Chessboard methodology, is still primarily on what buyers ought to do given their current segmentation circumstance. As a result, managers using these methodologies often believe that they have fully completed their sourcing decision-making if they have successfully identified in which of the four quadrants their category of supply currently resides. The idea that they should be trying to transform the current Supply Market Complexity to their advantage in the future does not appear to occur to them.

As Figure 5 demonstrates, buying leverage requires not just the acceptance of the current Supply Market Complexity but the ability to change it in the future, so that the buyer can extract even more value for money from suppliers. Given this, the ultimate goal of all buying activity is dynamic movement (Cox, 2001c, 2014).

This means that the buyer’s first task, after having analysed their current supply market (and, preferably, power) position, is to ascertain to what extent all categories of supply can, whenever possible, be sourced from supply markets with low complexity/supplier power rather than those with high complexity/supplier power.

While it is only rarely possible to change the relative importance to the business of a category of supply, the primary task of buyers is to ascertain to what extent it is feasible in the future to move from constraining market (or supplier power) positions to more congenial leverage positions. This movement is ultimately what is meant by the supplier relationship management strategy of Diversify.

There are, however, few detailed strategies and/or tactics identified within either of these two methodologies to explain how buyers can move dynamically from less to more congenial sourcing scenarios in the future. The Chess-
board, in particular, is silent about this issue, and although there are allusions in Purchasing Portfolio Analysis about the need to Diversify it is relatively silent about how to adopt the first principle of leverage, which advocates moving out of high supply market complexity to supply markets with lower complexity.

For these reasons, these methodologies fall someway short of the rigour and robustness required for a comprehensive guide to sourcing options selection. Buyers using this methodology, normally do one, or more, of the following:

- identify and use only a very limited number of strategic options and/or tactical levers;
- ‘cherry-pick’ strategic options and tactical levers from any of the quadrants; and/or in the worst cases;
- develop and implement inappropriate sourcing strategies and tactical levers.

B. Sourcing Portfolio Analysis and Power Positioning

To counter these perceived weaknesses IIAPS has developed an alternative approach to category management and strategic sourcing. This methodology, known as Sourcing Portfolio Analysis (Cox, 2014), is briefly explained in what follows, although given the lack of space the discussion focuses only on the strategic rather than the tactical options available for buyers to leverage improved value for money from suppliers.

Criticality Analysis

The starting point for category management in Sourcing Portfolio Analysis (SPA) is the realisation that there is a need for a much more sophisticated understanding of the types of categories of supply that must be managed. Rather than focusing on the ‘importance’ of a supply item for ‘Purchasing’ (with its emphasis currently on categories of spend and cost savings’) Sourcing Portfolio Analysis seeks to understand the relative criticality of categories of supply to the organisation, and how value for money from supply can be achieved.

This means understanding, as shown in Figure 6, the impact of a supply item on both the Commercial and Operational goals of the organisation.

By undertaking this analysis four rather than two segmentation possibilities are created, allowing for a much more sophisticated understanding of the different types of categories of supply that must be managed by organisations. This analysis is essential because it plays a major role in identifying:

- who will be part of the sourcing strategy team;
- the level of engagement of stakeholders;
- the level of time and resource that will be devoted to a specific sourcing strategy; and,
- the types of value for money KPIs that are to be sourced.

As the Criticality Matrix demonstrates there are four broad criticality choices, with resourcing implications for category team selection:

- **Strategic Critical**
  A strategic critical category will have a significant impact on both operations and the commercial/mission critical goals of the organisation. The total level of expenditure may not be high, although it often is. Such categories normally require extensive senior management attention, with the highest levels of organisational resource input in the sourcing process in terms of expenditure, time and involvement.

  - **Strategic**
    A strategic category will normally have only a relatively low impact on operational delivery, but nevertheless impact significantly on the strategic commercial/mission critical goals of the organisation. The total level of expenditure may not be high relatively. Such categories do not normally require extensive senior management attention, or the highest levels of organisational resource input in the sourcing process in terms of expenditure, time and involvement.

  - **Tactical**
    A tactical category will normally have only limited significance for either operational delivery or the commercial/mission critical goals of the organisation. The total level of
expenditure will not be high relatively. Such categories normally require only limited attention, with middle and lower-level managers participating in ad hoc teams. The organisational resource input required in the strategic sourcing process, in terms of financial resources, time and involvement of internal and external stakeholders, is normally quite low.

This four way segmentation of categories of supply is a far more analytically rigorous approach to category segmentation, not least because it provides a guide to the resourcing, levels of analysis and work scopes that buyers must engage in when developing sourcing strategies. It also avoids many of the positioning errors made by buyers forced into making simplistic choices as between High (i.e. Direct/Production) and Low (i.e. Indirect/Non-Production) categories.

Static Power Positioning and Sourcing Strategies

One of the ironies of the Purchasing Portfolio Analysis methodology is that it provided an embryonic approach to power positioning, but then used an overly simplistic segmentation based on the analysis of Supply Market Complexity. In Sourcing Portfolio Analysis this error is avoided. The main focus of analysis is the dyadic exchange relationships between buyers and suppliers. An analytical distinction is also made between static and dynamic leverage.

Space does not allow for a full exposition of the 150+ variables that must be analysed to fully understand the current balance of power between a buyer and potential suppliers. These variables are explained in more detail elsewhere (Cox, 2014; Cox and Ireland, 2015 forthcoming), but some of the major attributes are identified below in Figure 7.

The Power Matrix identifies four Power Scenarios in which buyers and suppliers can operate:

- **Leverage** – this is Buyer Dominance, where the buyer has all, or most, of the power resources to leverage improved value for money from the supplier, who possesses few countervailing power resources.
- **Alliance** – this is Interdependence, where both the buyer and supplier have many power resources that countervail those of the other party. Value will normally be shared in such relationships because neither party has the upper hand.
- **Market** – this is Independence, where the buyer and supplier have few power resources with which to leverage the other. The relative competence of both parties in bidding and negotiation will normally determine the share of value.
- **Dependency** – this is Supplier Dominance, where the supplier has all, or most, of the power resources to determine value for money outcomes and also to retain the lion’s share of value from the buyer, who possesses few countervailing power resources.

This approach provides a more comprehensive way of thinking about the dyadic exchange relationships that actually occur within supply markets. This is because it insists on the analysis of the power and leverage position between the buyer and all of the potential suppliers within a supply market.

The methodology recognises, therefore, that a supplier may be operating in the same supply market as other suppliers, but have a very different power and leverage position with the same buyer—this is an analytic refinement that other methodologies do not provide. More significantly perhaps, the methodology analyses a much more comprehensive range of analytic variables than the limited list of factors (i.e. monopoly, oligopoly, technological change, barriers to market entry, logistics costs and complexity, and relative scarcity) provided by Kraljic (1983) and Schuh et al. (2008).

By starting analysis with the unique power attributes that a buyer has with each of the potential suppliers in the market, the positioning that occurs reveals the ‘actual’ Supply Market Complexity facing the buyer. Figure 8 demonstrates this point. In the example provided a power analysis has been undertaken for four suppliers. In this case this is the ‘actual’ supply market that is available to the buyer. The analysis shows that the four potential suppliers do not operate in the same power positions. In fact some suppliers (A and D) are much more powerful than others (B and C) in this market.
This is the most significant insight that the Power Matrix provides. It allows managers to understand which suppliers are more (B and C) or less (A and D) amenable to value for money leverage, and, if all of the power attributes have been fully analysed, why this is so. This means, for example, that if a buyer decides that collaboration is an appropriate sourcing strategy then they would normally be advised to pursue it first with any suppliers in the Leverage (Buyer Dominance), followed by those in the Alliance (Interdependence), and only if they have no other options, in the Dependency (Supplier Dominance) power position.

The logic of this is that, when selecting from the 11 basic strategic sourcing options that may be available for buyers to choose from, an understanding of which are appropriate in particular power positions is a key analytic requirement. The 11 potential options are listed below:

1. **Insourcing** – vertical integration with no outsourcing.
2. **Joint Venture** – partial insourcing/partial outsourcing.
3. **Supply Chain Management** – full lean/agile/agilean supply chain collaboration with the first-tier supplier and in the supply chain.
4. **Supplier Development + Partial Supply Chain Management** – full lean/agile/agilean collaboration at the first-tier + information-based collaboration only within the supply chain.
5. **Supplier Development + Supply Chain Sourcing** – full lean/agile/agilean collaboration at the first-tier + arm’s-length sourcing from within the supply chain.
6. **Supplier Development** – full lean/agile/agilean supplier collaboration at the first-tier only.
7. **Partial Supply Chain Management** – information-based supply chain collaboration with the first-tier supplier and in the supply chain.
8. **Partial Supplier Development + Supply Chain Sourcing** – information-based collaboration at the first-tier only + arm’s-length sourcing from within the supply chain.
9. **Partial Supplier Development** – information-based supplier collaboration at the first-tier only.
10. **Supplier Selection + Supply Chain Sourcing** – competitive arm’s-length sourcing at the first-tier + arm’s-length sourcing from within the supply chain.
11. **Supplier Selection** – competitive arm’s-length sourcing at the first-tier only.

This list indicates that selecting appropriate strategic sourcing options is not as simple as selecting only between arm’s-length and collaborative approaches, as suggested by the Purchasing Portfolio Analysis and The Purchasing Chessboard methodologies. It becomes an even more complex choice when these operational ways of working with suppliers are linked with potential commercial outcomes in the relationship.

As Figure 9 shows, when commercial and operational analysis is combined a much more comprehensive typology of 31 strategic sourcing options is created. There is an additional sourcing strategy option that is potentially available to all buyers, and in all power positions with suppliers. The final potential option, Internal Value and Process Optimisation, is derived from Lean Thinking principles (Womack and Jones, 1996). All organisations can undertake internal process improvement initiatives to reduce unnecessary waste and inefficiencies in their business, whatever the power position externally.

Despite this, in Sourcing Portfolio Analysis not all sourcing options are potentially feasible in all power positions. As Figure 10 demonstrates, those operating in the Market (Independence) power position have fewer potential feasible sourcing options (when insourcing and joint ventures are excluded) than those operating in the other three quadrants.

The first task for buyers to undertake when making sourcing strategy selection decisions, therefore, is to understand their current power positions with their potential suppliers.
Having achieved this, it is then possible to identify (within each of the four quadrants of the Power Matrix) which of the strategic sourcing options identified earlier are potentially viable options with the supplier, or suppliers, in the most currently leveraged power position.

**Dynamic Power Positioning & Sourcing Strategies**

Unfortunately, even this much more comprehensive analysis of power positioning and options has limitations. This is because electing to work with suppliers who are currently in the most favourable leverage position is only a static approach to sourcing. The beauty of power positioning, however, is that it also provides scope for a dynamic approach to sourcing. This is because it is based on the assumption that there are preferable power positions that a buyer or supplier would ‘ideally’ wish to move to, and operate within, in the future.

As Figure 11 shows the ideal position for a buyer is to operate in the Leverage (Buyer Dominance) position. Conversely, the ideal position for the supplier is to operate in the Dependency (Supplier Dominance) position. Given this, it should be obvious that buyer and supplier exchange relationships are inherently conflictual. This is because, if buyers and suppliers are competent they should always be seeking ways to operate within their ideal or optimal, rather than sub-optimal, power positions.

If this is the case, then a competent buyer (or competent supplier for that matter) should not just understand their current (static) power circumstance, and identify what they should do given this. Their first task should be to understand the scope for dynamic movement. That is understand, assuming they are not already in their ideal leverage position, what in the future are the most appropriate strategies and tactics to move from their current less advantageous to a more advantageous leverage position. This logic applies to both arm’s-length as well as collaborative forms of buyer and supplier exchange.

When the Power Matrix was originally developed this dynamic movement was explained theoretically (Cox, 2001c; Cox et al., 2004), as outlined in Figure 12.

The potential routes by which buyers can improve their power positions with suppliers to achieve more favourable locations from the buyer’s perspective are:

- Route 1: Dependency to Leverage
- Route 2: Dependency to Alliance
- Route 3: Dependency to Market
- Route 4: Alliance to Leverage
- Route 5: Market to Alliance
- Route 6: Market to Leverage

This means that before considering static leverage options a buyer must analyse the scope to move dynamically from their current into more favourable power positions in the future. When considering dynamic leverage routes the key is normally to identify sourcing strategies that augment the power resources of the buyer, while diminishing the countervailing power resources of the supplier. The one exception is Route 5. In this case the power resources of the buyer and the supplier are both increased in the search for reciprocal value for money improvements.

Nine potential dynamic leverage strategies are normally considered when seeking to use these six dynamic leverage routes, although these are not all available for buyers in all routes (Cox, 2014):

1. Rationalise Supplier Power Positions
2. Optimise Design and Specification Leverage
3. Optimise Demand Management Leverage
4. Increase Competition and New Entry
5. Minimise Risks of Post-Contractual Lock-In
6. Reduce Information Asymmetry
7. Increase Supplier Hold-Up and Dependency
8. Joint Ventures
9. Insourcing

**Putting it All Together - The Strategic Sourcing Decision-Making Process**

It should now be clear that when selecting strategic sourcing options The First Principle of Leverage applies. Namely, a buyer should seek all opportunities to use dynamic levera-
age to change the current power scenario to a more advantageous one. Once this has been achieved, or if no such opportunities for movement exist, only then should a buyer select the currently most appropriate static sourcing option(s) that is currently available in the most favourable power position they can manage from in order to achieve improvements in value for money (not just cost savings).

The matrix conjoints criticality and power analyses to create 16 potential sourcing scenarios. The matrix does not provide a simplistic short-cut for managers, but rather seeks to raise the competence of buyers by helping them to understand:

1. The full range of sourcing strategies available for dynamic movement between power and leverage positions;
2. The full range of static sourcing strategies that may potentially be available;
3. The appropriate levels of work scope and analysis that should be undertaken for particular types of category of supply; and,
4. The potentially feasible sourcing strategies that are actually viable given unavoidable time and resource constraints.

How this approach to sourcing strategy development is undertaken sequentially is described below in Figure 14, which shows that a fully rigorous and robust sourcing strategy development process involves a number of key phases:

- Phase 1: Scoping Analysis
- Phase 2: Dynamic Leverage Analysis
- Phase 3: Static Leverage Analysis and Sourcing Strategy Selection
- Phase 4: Tactical Levers Analysis
- Phase 5: Go To Market
As the case example below demonstrates, this provides a much more rigorous and robust approach to sourcing strategy development than either Purchasing Portfolio Analysis or The Purchasing Chessboard.

**C. A Case Example Using Sourcing Portfolio Analysis and Power Positioning**

The case example that follows explains how the use of Sourcing Portfolio Analysis significantly improved the value for money from sourcing when compared with the use of a traditional Purchasing Portfolio Analysis approach.

**The Historic Purchasing Portfolio Analysis Approach**

In this case study an Oil & Gas company was sourcing land rigs for exploration and production work onshore. The category team had adopted a traditional Purchasing Portfolio Analysis approach to develop their category strategy. The analysis had identified the category as of High Purchasing Importance, but Low Supply Market Complexity. This was because there were many suppliers in the market with low search and switching costs, and the buyer had relatively high and regular volumes. This led them to locate their category in the Leverage quadrant, as shown in Figure 15.

Because the current financial planning and commitment structure in the company only allowed for short-term demand and capacity planning, the category teams were only ever given 30-day notice by their technical specifiers of the forward demand volumes that they could commit. Given their perception that they were operating in the Leverage quadrant, the category team naturally assumed that the best strategy was to use regular short-term, competitive bidding over day rates for the hire of land rigs and their operating staff. Although there were many potential large and small suppliers in the market the company normally used the three largest and, reputationally, the most technically qualified suppliers in the industry.

The problem for the category team was that, after participating in an independent benchmarking exercise, it became apparent that their current performance on cost was significantly inferior to their competitors, who also had better technical and health and safety performance. This confounded the category team. They had thought that they were pursuing best practice by consolidating their spend volumes before any bidding process, and then always taking the lowest price bid from the largest technically prequalified suppliers.

**Sourcing Portfolio Analysis – Scoping Analysis**

A category strategy review was then undertaken using Sourcing Portfolio Analysis. In the Scoping Phase it was agreed that the category was of High Commercial and High Operational Impact. This made the category Strategic Critical and worthy of the highest levels of corporate resourcing and attention. Historically, because it was perceived to be in the easy to manage Leverage quadrant, the category had been managed as a fairly tactical production item in terms of resourcing.

Figure 16 shows the current power positioning analysis of the potential land rig suppliers after analysis of the relevant demand and supply attributes and their profits from under-taking the work.

Unfortunately, for the buyers in this case, at the time the oil price was very high and this meant that the three large, incumbent suppliers (A, B and C) were operating in the Dependency power position. Analysis revealed, however, that there were four medium and smaller suppliers (W, X, Y and Z), who met the minimum technical standards required but who were not currently being used. These were in the Market power position because they had few power resources with which to leverage the buyer even when the oil price was high.

The analysis demonstrated that the buyer was not operating in one quadrant, with a simple choice to make based only on regular arm’s-length bidding, but had a much more complex set of choices to make, as Dynamic Leverage Analysis further demonstrated.
Sourcing Portfolio Analysis – Dynamic Leverage Analysis

The buyer in this case had a number of potential Dynamic Leverage Routes to consider, as shown in Figure 17.

In the case of suppliers A, B and C this meant assessing the potential of using Dynamic Leverage Routes 1, 2 or 3. For suppliers W, X, Y and Z this meant assessing the potential benefits of using Routes 5 or 6. In each case the aim was to see to what extent it was possible to move the potential suppliers into Leverage and, failing that, either Market or Alliance power positions, using any of the nine potential dynamic leverage strategies identified earlier.

After detailed analysis of these nine potential strategies the following conclusions were drawn:

1. Rationalise Supplier Power Positions
   It was feasible to work with suppliers W, X, Y and Z to significantly reduce costs, but only if technical specifiers were happy with their technical competence. If these suppliers could meet the technical standards required, and the buyer could use the demand levers identified below, it might also be possible to move these smaller suppliers permanently into the Leverage power position. Suppliers A, B and C on the other hand, given their size and their long-standing relationships with other large potential customers, had more countervailing power levers. This meant that, if the demand levers below could be implemented, there was scope to move them under conditions of high oil prices, but only into the Alliance power position.

2. Optimise Design and Specification Leverage
   It was apparent that the technical specifiers were a serious obstacle to improved leverage. This was because their specifications tended to exclude all but the three largest, and most expensive, suppliers from the bidding process. If these suppliers had demonstrably superior technical performance this would perhaps not have been a problem. Unfortunately, the company had no technical KPI performance data that demonstrated the superior performance of the three larger suppliers. It was obvious that decisions were being made about technical competence using subjective and risk averse assessments of ‘brand’ rather than on objective comparative performance data. If a level playing field could be introduced for all potential suppliers then the scope to work with new entrant suppliers W, X, Y and Z might be feasible.

3. Optimise Demand Management Leverage Positions
   After careful analysis of longitudinal demand data it was apparent that the company had a long-term annual requirement for land rigs and service. The only thing that varied was the exact volumes required over any given 30-day period. This meant that the company could enter into long-term relationships with suppliers, even though they could not always specify exactly what the volumes would be on a monthly basis. In fact, over the previous five years the company had always tended to work with the same suppliers, but only using short-term arm’s-length relationships. Discussions with these incumbent suppliers indicated that, as a result of this uncertainty, they tended to provide only their ‘B’ and ‘C Teams’ to this buyer. This was because other major oil companies provided them with longer-term commitments to whom they normally sent their ‘A Teams’. It was hardly surprising that this short-term financial, rather than demand and supply optimisation, approach to sourcing resulted in the company receiving much lower technical performance and higher costs than its competitors. In this circumstance, only by making longer-term commitments to preferred suppliers, and working closely with them, could the buyer hope to achieve significant improvement in performance. The current lack of leverage with suppliers was self-induced by the lack of longer-term financial planning and commitments. If this constraint could be eradicated then improved power positioning and the use of more collaborative sourcing strategies was possible with all suppliers, but especially with suppliers W, X, Y and Z.

4. Increase Competition and New Entry
   It was agreed that if the two demand-related levers above could be utilised then suppliers W, X, Y and Z were candidates for potential new entry. Their entry into the bidding process would also significantly improve value for money leverage with suppliers A, B and C.

5. Minimise Risks of Post-Contractual Lock-In
   This was not a current issue or potential lever because the buyer had only ever used short-term arm’s-length bidding strategies. The buyer was, however, warned that if longer-term collaborative sourcing strategies were used in the future, this risk would need to be guarded against.

6. Reduce Information Asymmetry
   The analysis undertaken demonstrated that the buyer suffered from high levels of information asymmetry about what was done technically and at what cost, and with what levels of profitability. The buyer assumed that suppliers were only making normal returns, although an initial ‘Should Cost Analysis’ demonstrated that the larger suppliers (A, B and
C) were making above normal returns in conditions of high oil prices. It was agreed that, if the buyer could adopt a more collaborative open-book approach to sourcing, rather than relying solely on competitive bidding, then this would generate much greater transparency and reduce the information advantages favouring current suppliers.

7. Increase Supplier Hold-Up and Dependency
If the buyer decided in the future to adopt longer-term collaborative sourcing strategies then the opportunities to create supplier hold-up and buyer-controlled dependency was explained to the category team. It was recognised, however, that the scope to achieve this was clearly much easier with suppliers W, X, Y and Z than the larger suppliers A, B and C.

8. Joint Ventures
It was decided that, given current strategic views in the company about core competencies, and with current pressures on scarce financial resources, investing in joint ventures with suppliers in highly competitive supply markets making low or normal returns was not a sensible sourcing option.

9. Insourcing
A similar decision was made about the undesirability of insourcing, and for the same reasons as indentified for the potential joint venture option.

The analysis revealed, however, that if the company was prepared to make the internal design and specification and demand management changes identified above, a transformation could be made in their future power and leverage positions, and with all suppliers. Because of the potentially very high levels of volumes potentially available annually relative to the smaller suppliers’ businesses, it was possible to move suppliers W, X, Y and Z from Market into Leverage power positions using Dynamic Leverage Route 6. Leverage is obviously the most favourable position for a buyer to operate within. This is because it normally provides them with the maximum scope to drive continuous improvement in value for money from suppliers, using either arm’s-length or collaborative ways of working (Cox, 2014).

In the case of suppliers A, B and C there was less scope for a radical change in power positions because of their lack of potential dependency on the buyer’s volumes for revenue, and even if these were committed in a more planned way with preferred suppliers in the future. Despite this, if the changes suggested above were made and more collaborative long-term relationships were offered, then even suppliers A, B and C could be moved from Dependency to the Alliance power position in the future, using Dynamic Leverage Route 2. If this was achieved then more collaborative rather than arm’s-length sourcing strategies would be feasible in the future.

Sourcing Portfolio Analysis – Future Static Leverage Analysis and Sourcing Strategy Selection
The dynamic leverage analysis resulted in a much more comprehensive understanding of the scope to move supplier power positions, as well as all of the potential feasible sourcing options available to the category team in the future. The outcome of the analysis is outlined in Figure 18.

Having identified the future Sourcing Portfolio Analysis positions for each supplier it was then possible to identify the most appropriate strategic sourcing option(s) for market testing. In selecting the most appropriate sourcing decision a two-stage process was adopted. First, the buyer identified the potentially feasible options available given the power positions within which they could realistically operate with suppliers in the future. Second, they then identified which of these potentially feasible options were actually viable. ‘Viability’ here meant that the buyer had all of the necessary buy-in, resources and competencies internally to implement the sourcing strategy successfully, and also that the potential suppliers did also.

Given that insourcing and joint ventures had already been ruled out during the dynamic leverage analysis, Figure 19 demonstrates the full range of sourcing strategy options...
that were potentially feasible if the buyer was able to move suppliers A, B and C into the Alliance power position and/or suppliers W, X, Y and Z into the Leverage power position in the future.

The analysis showed that there were two broad power positions in which the buyer could choose to work in the future, and with different types of suppliers and with much more collaborative sourcing strategies compared with the regular arm’s-length bidding traditionally used in the past. This led to a heated internal discussion about which of these two broad options should be selected.

There were three schools of thought. The Risk Averse School (in which technical specifiers predominated) argued in favour of adopting a more collaborative approach, but only with suppliers A, B and C in the Alliance power position. The Young Turks (dominated by procurement managers) argued in favour of a radical transformation using collaborative sourcing strategies, but with suppliers W, X, Y and Z.

The third school of thought (led by the IIAPS consulting team) argued for a Plan Do Check Act (PDCA) approach. This was the approach that was eventually pursued. It contended that while a more collaborative approach should be adopted, there should be no rush to smaller suppliers until the company itself had developed its own internal competencies to manage collaboration. This required at the very least the establishment of robust technical and commercial KPIs to measure current performance objectively.

Furthermore, it was argued that suppliers W, X, Y and Z should only be used initially in pilot projects to demonstrate their competence technically. This was necessary in order to win the support and buy-in of currently highly sceptical technical specifiers, and allow objective performance data rather than subjective preferences to determine the suppliers and power positions to be adopted in the future.

This debate internally resulted in a decision to move away from the historic arm’s-length to a more collaborative way of working, but it did not resolve the issue of what type of collaboration should be adopted in the future. Once arm’s-length Supplier Selection and/or Supply Chain Sourcing options were excluded, this left seven potential collaborative ways of working that were potentially feasible sourcing options in either Alliance or Leverage power positions.

Given this, the next question to be answered was about whether or not the buying organisation possessed, or could acquire in time, the necessary technical and commercial competencies to successfully implement any of these potentially feasible options?

In this case, analysis led to the following conclusions.

Non-Viable Options:

- Supply Chain Management
- Supplier Development + Partial Supply Chain Management
- Supplier Development + Supply Chain Sourcing
- Supplier Development/Partial Supply Chain Management

None of these potentially feasible options were viable because neither the buyer nor the supplier had the technical or commercial competencies to implement these highly time and resource intensive options, and could not acquire them in time.

Viable Options:

Partial Supplier Development + Supply Chain Sourcing – viable in either Alliance or Leverage power positions, and with all suppliers, because both the buyer and the supplier had the technical or commercial competencies to implement information sharing to optimise joint performance, and also to collaborate on supply and value chain mapping to identify arm’s-length supply chain input improvements in the future.

Partial Supplier Development – viable in either Alliance or Leverage power positions and with all suppliers because both the buyer and the supplier had the technical or commercial competencies to implement information sharing to optimise joint performance, even if the more resource intensive time-consuming supply chain option was rejected.

Internal Value and Process Optimisation – this option was added because not only was it viable, but it was also necessary if the buyer was to pursue more collaborative ways of working with suppliers in the future.

After internal discussion two sourcing strategy options were adopted in the future. These were Partial Supplier Development with Supply Chain Sourcing. This offered more scope for leverage than Partial Supplier Development on its own, and could be adopted relatively easily in both Alliance and/or Leverage power positions). This conjoint strategy was supported as well by the implementation of an Internal Value and Process Optimisation strategy.

The result of this exercise can now be seen graphically in Figure 20, which shows the sourcing strategy options selected for the suppliers in both the Alliance and Leverage power positions, after viability analysis had been completed. Obviously the major difference between these two power positions was that the buyer expected to achieve significantly more value for money leverage if they were eventually able to award their volumes to, and work collaboratively on information sharing to optimise performance with, suppliers W, X, Y and Z operating in the Leverage power position. This is the power position in which the buyer is dominant, and most of the value generated from collaboration is passed.
Sourcing Portfolio Analysis – Outcomes After Tactical Levers Analysis and Market Testing

Space does not allow for a full analysis of all of the tactical levers that were applied to the two conjoined sourcing strategies selected, or to fully describe the market testing process utilised. Suffice to say that the key tactical levers used were focused on ensuring how volumes should be divided annually over a three-year term, so as to ensure that competition was maintained post-contractually amongst collaborating preferred suppliers. Other key tactical levers were supplier commitments to transparency and open-book dealing; as well as agreements for volumes to be capable of movement between suppliers based on performance post-contractually and early termination clauses in the event of a failure to meet minimum agreed KPIs.

It was also decided that volumes should be guaranteed to three suppliers, but that the bulk of these volumes would initially be awarded in the first year to the best two bids from the larger suppliers (A, B or C). The best performing/bidding smaller supplier would also receive some guaranteed ‘pilot’ volumes to allow them to demonstrate their technical and commercial proficiencies. These tactical levers were put in place to ensure that the buyer retained effective leverage post-contractually even as they collaborated with suppliers in the future.

The result of the market test was that suppliers B and C received 90% of the anticipated volumes in the first year, and supplier Y received 10%. Supplier X (the second best performing smaller supplier) was told that they would be called upon in the future in the event of a failure by any of the selected suppliers to meet agreed performance targets post-contractually.

In the first year the overall performance of supplier Y technically and commercially was far superior to that of suppliers B and C. As a result, it was decided to retain Y and C (the best performing larger supplier) and to give them 90% of the volumes, but with Y receiving 50%. The remaining 10% was awarded to supplier X. At the end of the second year, based on performance, the volumes were divided 50% to supplier Y, 30% to supplier X and 20% to supplier C.

The sourcing strategy far exceeded expectations and confounded the sceptical ‘technical specifiers’ in this case. Not only did the smaller suppliers show a markedly higher propensity to collaborate, they also delivered superior technical performance and lower total costs of ownership. By the end of the third year the collaborative information sharing, coupled with medium-term volume commitments, had resulted in the replacement of the supplier (B) with the most exalted brand in the industry by two smaller and much more technically and commercially proficient suppliers.

This decision was driven by objective performance against transparent KPIs and not by subjective preferences. The strategy also demonstrated that collaboration is often a much more effective sourcing strategy in the Leverage power position than arm’s-length competitive bidding, although this will not always be the case.

D. The Need for a ‘Paradigm Shift’ in Category Management and Strategic Sourcing

The identification of the most appropriate sourcing strategies is, as we have seen, far more complex than anything suggested by the Purchasing Portfolio Analysis or Purchasing Chessboard methodologies. Sourcing Portfolio Analysis also has a very different logic when making recommendations for action in particular power scenarios. The level, and type, of analysis that is demonstrated here is, we believe, what one should expect of a highly competent organisation seeking to develop rigorous and robust sourcing strategies.

Unfortunately, the criticisms made about currently used tools and techniques here are not new, and many of them were initially voiced as early as the mid-1990s (Cox, 1996a, b, 1997a, b, 1999a, b, c). Despite repeated attempts since then to argue the case for a change of perspective (Cox et al., 2003, 2004; Cox, 2007, 2008a, 2008b, 2013) it is now clear that what may be required is a ‘paradigm shift’ in the profession (Cox, 2014).

As Thomas Kuhn (2012) argued a ‘paradigm shift’ occurs in scientific enquiry when current orthodox views about theory and practice (‘normal science’) is incapable of dealing satisfactorily with anomalies that cannot be explained. This creates an explanatory crisis’.

He also understood that the process by which a ‘paradigm shift’ generates a scientific revolution is inherently conflictual. This is because ‘normal science’ creates its own scientific community’ of professional adherents who are dedicated to:
• the determination of significant facts;
• the matching of facts with theory; and,
• the further articulation of the current ‘normal science’ theory.

In this circumstance a new paradigm is potentially an extremely destabilising event for adherents to ‘normal science’. This means that the speedy acceptance of a new paradigm is likely to be the very last, rather than the first, thing that the current scientific community will accept. One can only hope that this will not be the case for the development of a new way of thinking about category management and strategic sourcing. This is because there is already growing evidence of a ‘crisis’, and a recognition that many of the tools being proffered to managers as best practices are not ‘fit for purpose’.

In Sourcing Portfolio Analysis the case has been made once again for the use of Power Positioning as the way forward for the development of a science of strategic sourcing and buyer and supplier exchange (Cox, 2014). This is because this theory and its methodology do not completely reject past thinking, rather it seeks to create a new synthesis that has a superior ability to explain circumstances, and also to predict the most appropriate sourcing options to deliver particular desired value for money outcomes. This opportunity to build on past work is helpful because, as Kuhn (2012) has argued:

“Since new paradigms are born from old ones, they ordinarily incorporate much of the vocabulary and apparatus, both conceptual and manipulative, that the traditional paradigm had previously employed. But they seldom employ these borrowed elements in quite the traditional way. Within the new paradigm, old terms, concepts, and experiments fall into new relationships with one another.”

For this benign outcome to eventually come to pass there is, however, still much to do to develop a fully rigorous and robust science of category management and strategic sourcing. It is still necessary, for example, to identify which strategic sourcing options work best in particular power circumstances, and across different types of industry and public and/or private sector organisational types.

Obviously, for these practices to disappear and for Power Positioning methodologies to be fully accepted as the basis of a new science of strategic sourcing, there will need to be a ‘paradigm shift’ in current thinking in the profession. While it is unlikely that everyone in the profession will accept the need for this, it is perhaps fitting to conclude with a final quote from Thomas Kuhn (2012):

“A scientific theory is usually felt to be better than its predecessors not only in the sense that it is a better instrument for discovering and solving puzzles but also because it is somehow a better representation of what nature is really like”

IIAPS believes that the Power Positioning approach, which is the intellectual foundation on which Sourcing Portfolio Analysis is based, is a better instrument (IIAPS, 2010a, 2010b, 2012, 2014, 2015). This is because it provides a much more rigorous and robust way of thinking about strategic sourcing options and choices than any of the alternative approaches currently available. As a result, we believe it is a better representation of what buyer and supplier exchange is really like.

E. Benchmarking Current Organisational/Process and Individual Competencies Against Best Practice

It will come as no surprise that IIAPS believes that most of the organisations seeking assistance with competence development in Procurement and Supply Management are currently locked into sub-optimal portfolio thinking. This thinking is associated with what we have termed Tactical Spend Management thinking. In our view this can only result in sub-optimal ways of thinking, with sub-optimal ways of developing competence.

IIAPS established its PSCM Index (organisational/process) and ICA Index (individual competence) benchmarking tools in 2010 (see IIAPS Corporate Services Brochure and the three IIAPS Whitepapers Beyond Kraljic, World-Class or Best-in-Class? and Improving Procurement Competence) to address this problem. The idea then was that, if CPOs and Commercial Directors understood where their organisation and staff are in relation to world-class best practice, this would provide them with the ability to begin their transformation journey.

The transformation journey requires the rejection of a focus on ‘categories of spend’ in favour of a focus on ‘categories of supply’. This thinking also requires the creation of a cross-functional category management and strategic sourcing process that focuses on ‘strategic, value for money trade-offs’, not just ‘tactical, cost savings’ as the basis of engagement with the organisation (see the IIAPS White Paper Developing Competence in Procurement & Supply).

Unfortunately current thinking still appears to be primarily focused on Tactical Spend Management rather than Strategic Value Flow Management thinking. If this is so then it would appear that current procurement practice needs considerable Right Sizing. In our view this can only be achieved effectively if Power Positioning and Sourcing Portfolio Analysis techniques are adopted.

For those interested in benchmarking their current organisational process and/or individual staff competencies against these ‘best practice’ ways of working please contact IIAPS at info@iiaps.org.
Further Reading

Relevant 2015 IIAPS Blogs (www.iiaps.org/blog):

1. 12 Causes of Sub-Optimal Category Management & Strategic Sourcing
2. Improving Category Management & Strategic Sourcing
3. The Problem with Cross-Functional Involvement & Buy-In
4. Tactical Solutions to the Lack of Cross-Functional Involvement & Buy-In
5. Value Flow Management: Value-Driven Category Management & Strategic Sourcing

Relevant IIAPS White Papers (www.iiaps.org):

1. Beyond Kraljic (IIAPS White Paper 2010/1)
2. World-Class or Best-in-Class (IIAPS White Paper 2010/2)
3. The QV Way (IIAPS White Paper 2012/1)
4. Improving Procurement Competence, (IIAPS White Paper 2014/1)
5. Developing Competence in Procurement & Supply: The Two Options of Tactical Spend Management or Strategic Value Flow Management (IIAPS White Paper 2015/1)

References


