Graduate Diploma in Purchasing and Supply

Strategic Supply Chain Management

Senior Assessor’s Examination Report

Series May10
SECTION A

Q1 (a)  Analyse the typical corporate strategies that Japanese electronics firms have adopted over the years. Recommend and justify new strategies for moving forward. (15 marks)

Q1 (b)  Identify the implementation issues that will need to be addressed in relation to the new strategies. (10 marks)

Analysis of the Question

The aim of part (a) was to test candidates’ understanding of corporate strategies and their ability to analyse a case study situation. Learning objectives 1.5 and 1.7.

The aim of part (b) was to test candidates’ understanding of strategy implementation issues and their ability to analyse a case study situation. Learning objectives 2.1 and 2.2.

Analysis of the Answer

Part (a) In the 1960s Japanese electronics firms pursued a growth strategy of market development by entering new markets with existing products. This is a medium-risk strategy. Products are already established in existing markets, but extensive market research is required to identify the preferences of the new consumer-base in order to modify product offerings accordingly. Market development was pursued in accordance with a combined generic strategy of cost leadership and differentiation. The cost leadership element enabled firms to undercut Western competitors’ prices, while the differentiation aspect enabled the Japanese to offer features that were not previously available. A concentration on continuous improvement through product and process innovation ensured that the Japanese companies stayed ahead of the competition.

Japanese electronics firms expanded between 1960 and 1990 by diversifying into a number of related and non-related markets. Diversification, especially the non-related form, is a high-risk strategy inasmuch as it entails entering new markets with new products. The situation is exacerbated by a vertical integration strategy, where organisations control all stages of the supply chain internally. It is difficult to focus resources on such a broad range of markets and supply chain activities, thus affecting efficiency and profitability. Since 1990, Japanese electronics firms have consolidated, neither growing nor reducing their presence. Some may argue that this constitutes a “do nothing” approach.

Japanese electronics firms need to reverse their diversification and vertical integration strategies. They should identify their core competences and concentrate on markets and supply chain activities that utilise these unique capabilities. Non-related businesses should be divested and non-core activities outsourced to other companies. Clean technologies such as solar panels and electric-car batteries should certainly be considered, but developing services that are closely related to core competences should also be pursued. This will allow firms to capture lucrative market and supply chain positions, thus enabling differentiation and focus strategies to be adopted and profitability to be realised once the recession is over.

Part (b) The cultural paradigm of the organisations will be affected and careful implementation will therefore be required. Vision and mission statements need to be
drawn up, as well as corporate, business and functional plans linked by a hierarchy of objectives. Strategy and structure should be aligned and appropriate staff, skills, styles and systems put in place. The proposed strategies require radical change which is likely to meet with resistance, as demonstrated by Sir Howard Stringer's problems at Sony. Restraining and facilitating forces should be identified and change management techniques incorporated. The use of change agents should be considered and the support of the Japanese government and industry associations is essential. The business benefits will need to be explicitly demonstrated and key stakeholders kept informed and satisfied at all times. Top management support is essential and strong leadership and influencing skills is required to drive the changes forward. Reinforcement, monitoring and review of the chosen strategies must take place.

Exam Question Summary

There were three requirements of part (a), analysis, recommendation and justification. Most answers contained a reasonable analysis of the existing strategies, although a number just copied out text from the case study without adding any value. Not all answers suggested future strategies or fully justified them. Better answers demonstrated a robust understanding of corporate strategies in relation to the case study situation, utilising core academic concepts to inform their discussion. Some candidates discussed lean supply and network sourcing here and thus duplicated their effort in Q2. This demonstrates poor planning of answers.

Part (b) was related to implementation issues, therefore answers should have adopted a broad approach. However, many answers just focused on 'soft' change management issues. Although there was less scope for case application in relation to this question, there should have been some mention of the cultural issues and the resistance encountered by the Sony CEO. Better answers demonstrated a robust understanding of implementation issues in relation to the case study organisation.

Q2 Evaluate the contribution of lean supply and network sourcing principles to the success of Japanese electronics firms. (25 marks)

Analysis of the Question

The aim of this question was to test candidates’ understanding of lean supply principles and their knowledge of the network sourcing concept. Learning objectives were 5.2, 6.1.

Analysis of the Answer

Lean supply is an approach which enabled Japanese electronics companies to reduce waste and improve efficiency. The lean concept is appropriate in process-based industries with stable markets, constant and regular demand, and standardised products. These are all elements that existed within the electronics industry during the boom years. Lean supply enabled Japanese firms to produce cheap, reliable products and achieve process improvements.

The two concepts of value stream and waste are at the heart of lean thinking. Activities that add value (from the customer's perspective) are emphasised and those that create
waste and efficiency are eradicated. The seven common types of waste are: over-production, waiting, re-work, excess processing, excess movement, excess transportation, and excess stock. Techniques for waste reduction are: level scheduling, reduction of demand amplification, demand-pull systems, and root cause elimination. The benefits of lean thinking that are generally put forward are: improved flow, less interruption, reduced work in process, reduced transportation, reducing handling, less quality problems, reduced lead-times, faster response times, standardisation, and continuous improvement. These can be summarised as less waste and more added value. Close, collaborative relationships with suppliers are essential in order to leverage lean concepts throughout the supply chain. The Japanese model of cross-shareholdings with suppliers facilitates this aspect of lean supply.

Network sourcing is a structured approach to supply chain management that is broadly compatible with lean supply. It typically consists of three pillars: policy deployment, cross-functional management, and supplier integration. At a more detailed level, the component parts of the approach are: supplier tiering, few supply sources, high asset specificity and risk-sharing, low value-added ratio, bilateral design, supplier innovation, long-term relationships, supplier grading and self-certification, supplier coordination, and supplier development. The benefits claimed for this approach are: faster adaptation to change, reduced lead times, lower transaction costs, long-term stability and trust, shared knowledge, reduced working capital, joint learning, and lower product development costs.

Lean supply and network sourcing are prescriptive, empirical approaches which have been very successful in mass production industries such as electronics, and have proved to be entirely compatible with the Japanese approach to business and supply chain management. However, the approaches may have become too restrictive over the years as circumstances have changed. As demand stalls and Japanese companies pursue new corporate and supply chain strategies, moving into new-technology and service-related markets, these approaches may need modification. A more contingent approach to supply chain management advises careful analysis of the specific market circumstances and the adoption of appropriate sourcing practices based on that assessment. Agile and hybrid approaches to managing the supply chain enable organisations to be more flexible and responsive, thus being more appropriate in situations of volatile and irregular demand.

Exam Question Summary

The answers to this question were generally very poor. The understanding of network sourcing was almost non-existent. Many candidates thought that having a presence in many unrelated markets was network sourcing. The coverage of lean supply was rather descriptive. Answers should have contained a true evaluation of the two concepts in terms of how they enabled Japanese electronics firms to achieve success, rather than just a description and benefits. Both networking sourcing and lean supply should have been covered. Better answers demonstrated a robust understanding of both lean supply and network sourcing in relation to the case situation.
SECTION B

Q3 A vice-president at A T Kearney, a major consultancy organisation, recently stated that the current economic recession is a “window of opportunity” for procurement to make a difference and prove itself. (Source: Supply Management 2009)

Explain how procurement can improve organisational performance in difficult economic times.

Analysis of the Question

The aim of this question was to test candidates’ understanding of procurement and supply chain principles and their ability to propose innovative supply chain strategies. Learning objectives 3.2 and 3.4.

Analysis of the Answer

Procurement can make a difference to organisational performance in terms of cost reduction, quality, innovation, delivery and supplier relationship management. There should be good alignment between supply and demand, accurate forecasting and planning systems set up, and robust vertically integrated information systems established. Supply positioning analysis and strategic source planning should be carried out. All suppliers should be assessed in terms of their capability, competence, capacity, and commitment. Organisations should rationalise their supply base and work closely with key suppliers through supplier relationship management, early involvement initiatives and value-enhancing activities. Quality principles such as zero defects and continuous improvement should be driven throughout the supply chain. Suppliers should be encouraged and supported to drive innovation and technical advances.

Procurement should sponsor the adoption of certain lean principles in order to reduce waste and improve efficiency. Non-value-adding activities could be eradicated or reduced and value-adding activities optimised. Build-to-order systems, where upstream leanness is combined with downstream agility, would facilitate flexibility and responsiveness. Outsourcing of non-core activities should be considered. A cross-functional approach to outsourcing is essential, and the relevant costs, benefits, and risks need to be assessed carefully. Particular attention should be paid to issues of asset specificity, and the potential dangers of supplier lock-in and loss of intellectual property. Key performance indicators and service level agreements linked to effectively managed incentive contracts are essential requirements. Specific public-sector initiatives could also be covered, such as those relating to the extension of payment terms and assistance for local suppliers.

Exam Question Summary

Some answers, while expounding the use of best practice principles, failed to explicitly demonstrate how they can improve organisational performance as stated in the question. Other answers were rather tactical and anecdotal, and did not fully utilise core procurement and supply chain concepts. Better answers demonstrated a robust knowledge of core procurement and supply chain principles and clearly showed how they can improve organisational performance.
Q4 Analyse the nature and impact of globalisation on strategic supply chain management. (25 marks)

Analysis of the Question

The aim of this question was to test candidates’ knowledge of globalisation and their understanding of how globalisation impacts supply chain management. The learning objective being tested was 4.4.

Analysis of the Answer

Globalisation is the integration of world economies and the rapid increase in the movement of goods, services and capital across national borders. It has significant political, cultural, economic and technological implications. Globalisation of economies, markets, industries, finance and culture should all be considered. There is much debate as to whether globalisation is universally beneficial. Advocates argue that globalisation benefits both developed-world companies (by giving them access to larger markets and alternative production facilities) and consumers (through extended choice and lower prices), as well as helping developing countries (by means of investment, technology transfer, economic growth and employment opportunities). However, critics of globalisation contend that it leads to the exploitation of developing countries and the homogenisation of national cultures.

Different industries and organisations will vary to the extent by which they embrace globalisation, determined by the strength of drivers related to markets, costs, governments and competitive forces. The organisations which are most likely to pursue globalisation are those that find themselves in limited markets, under considerable cost pressure, governed by liberal trading policies, and facing intense competition. The development of advanced communication and integration technologies has acted as a facilitator to globalisation.

Organisations must decide how to configure and coordinate their supply chains to address the globalisation drivers. In terms of configuration, they can either concentrate their supply chain activities in a limited number of locations (to take advantage of resource availability, government support, and demand conditions) or disperse them globally. Coordination of the supply chain, in terms of nature and complexity, is thus determined by the organisation’s configuration decisions. The efficiency of supply chain operations will depend on the effective optimisation of global hub-and-spoke logistics systems.

Low-cost sourcing from developing countries is of course the latest manifestation of globalisation and has a direct impact on supply chain activities. Organisations will need to manage these supply chains very carefully and take into account a number of factors that may restrict global sourcing from achieving competitive advantage. International barriers to trade include: import/export licenses, quotas tariffs and embargoes, technical standards, restricted channels and providers, and currency exchange controls. International procurement issues include: sourcing difficulties, language problems, cultural differences, currency conversions and fluctuations, different legal systems, unclear responsibilities, customs issues, and payment methods. Logistics issues include: inventory management and transportation delays. Free-trade agreements will mitigate the international barriers, while an incremental and planned approach is needed to overcome
the procurement and logistics issues. Internal development and/or the appropriate use of agents would facilitate any initiatives.

**Exam Question Summary**

Some answers discussed global sourcing only without covering the broader globalisation issues. Others discussed generic supply chain management issues rather than focusing on the global dimension. Better answers demonstrated a robust knowledge of the nature of globalisation and its impact on supply chain management.

**Q5 (a)** Explain the concepts of ‘value’, ‘added value’, and the ‘value chain’.  
**Q5 (b)** Analyse how core competence thinking can determine an organisation’s supply chain structures and relationships.

**Analysis of the Question**

The aim of **part (a)** was to test candidates’ knowledge of the ‘value’ and ‘added value’ concepts, as well as their understanding of the role of the ‘value chain’ principle. The learning objective being tested was 5.3.

The aim of **part (b)** this question was to test candidates’ knowledge of core competence thinking and their understanding of how core competence thinking affects the supply chain. The learning objective being tested was 6.3.

**Analysis of the Answer**

**Part (a)** Value is defined as the relative worth or importance of an attribute or feature. Added value refers to the increase in worth of a product or service as a result of a particular activity. Value can be added by either increasing the price customers are willing to pay (by improvements in quality, additional product features, improved customer service levels, or perceived exclusivity) or by reducing the cost of production.

In terms of processing operations, there are three types of activity that may be present: non-value-adding (NVA) activities, necessary but non-value-adding (NNVA) activities, and value-adding (VA) activities. NVA activities are pure waste and should be eliminated completely. NNVA activities create no value but are required for operational sustainability and should be reduced as much as is feasible. VA activities should continue but even these can be improved within a philosophy of continuous improvement. The concept of value must be defined from the viewpoint of the end customer.

The value chain, as epitomised by Porter, is a disaggregated representation of the various value-adding activities which underpin an organisation’s operations, which seeks to shed light on the sources of profitability. The value chain model consists of mapping out primary and support activities. Primary activities include inbound logistics, operations, outbound logistics, marketing and sales, and service. Support activities include infrastructure, human resource management, technology development and procurement.

The activities that critically underpin an organisation’s competitive position are identified, followed by the determination of those factors which sustain it, termed the value-drivers.
Finally, the linkages between the value-drivers are identified. These are the most important source of sustainable competitive advantage, as they are opaque and difficult for competitors to imitate. The model is a useful way of relating resources to the strategic purposes for which these resources are to be used. It is the key to understanding strategic capability, since it is an analysis which goes beyond a resource audit and looks in detail at how resources are being used, controlled and linked together.

**Part (b)** Core competence thinking dictates that an organisation concentrates on the activities and processes that enable it to achieve sustainable competitive advantage and outsource everything else. These activities and processes are likely to be unique, durable, non-substitutable, and difficult for competitors to imitate. They are the means of differentiation for the organisation that must be preserved and deployed. Organisations need to identify their core, complementary and residual resources, and feed this information into the strategic make/buy decision-making process. Different supply chain structures and relationships will be required for managing each of these resource types.

Core competence thinking ensures that there will be less vertical integration, more emphasis on suppliers and supply chain management, flatter hierarchies, a reduced number of employees, more external relationships, and less functional working. Some organisations may even become "virtual", concentrating on brand management only and buying in all other services and resources. It may be possible to identify and develop unknown suppliers, enclose them by means of joint ventures and sole supply agreements, and purchase in hard to imitate manner. Sustaining this in the long-term is, however, difficult.

**Exam Question Summary**

In **part (a)** many candidates stated that definitions of value and added value varied considerably. This is certainly true and examiners were flexible in awarding marks. However, the concepts must be explained in relation to the customer. As definitions are rather complicated, the use of appropriate examples aided clarity. Most answers discussed Porter’s value chain, but the coverage was rather descriptive without really explaining its purpose and relationship to competitive advantage. Better answers demonstrated a robust understanding of all three concepts with relevant examples.  

**Part (b)** was generally answered well, with no particular issues apart from the normal variation in terms of depth and scope. Better answers demonstrated a robust understanding of core competence thinking and how it affects supply chain structures and relationships.
Q6 Using Porter’s Five Forces Model, evaluate the competitive environment of an organisation with which you are familiar. Outline suggestions to improve the current situation. (25 marks)

Analysis of the Question

The aim of this question was to test candidates’ understanding of Porter's 5 Forces model and their ability to conduct an analysis of an organisation's competitive environment. The learning objectives being tested were 1.3 and 1.5.

Analysis of the Answer

Porter's Five Forces model is a means of analysing an organisation's competitive environment. The five forces are: competitors jockeying for position; the bargaining power of buyers; the bargaining power of suppliers; the threat of new entrants; and the threat of substitute products. The intensity of each force is determined by the nature and development stage of the market, the relative numbers of buyers, suppliers and competitors, and the barriers to entry and imitation that exist.

Rather than just describing the model, most of the answer should be related to applying it to the chosen organisation and critically evaluating its competitive environment. Suggestions to improve the situation of the organisation, based on the findings, should be outlined.

Exam Question Summary

Some answers based their analysis on a public-sector organisation with disastrous results. This model is not appropriate for public-sector organisations as they do not operate in a competitive market. Public-sector candidates would be advised to familiarise themselves with published analyses or to develop their own based on high-profile organisations in preparation for this type of question. It is acceptable for candidates to use organisations other than their own, but this may affect the quality of response.

An on-going problem with answers relating to the 5-forces model is that candidates often misunderstand the 'bargaining power of buyers' dimension. This force refers to the ‘buyer’ as the focal organisation’s customers, rather than its own purchasing activities. The relationship between the focal organisation’s buyer and its suppliers is covered by the ‘bargaining power of suppliers’ dimension. Better answers segmented and differentiated between different types of customers and suppliers.

Other problems were the inclusion of issues that were not related to the model and not explicitly linking the recommendations to the findings of the analysis. Better answers demonstrated a robust understanding of Porter's five forces model, conducted a critical analysis of the competitive environment of the chosen organisation using the model, and suggested practical and appropriate improvements based on the findings.

APPENDIX:

Syllabus matrix indicating the learning objectives of the syllabus unit content that each question is testing
<table>
<thead>
<tr>
<th>Question No.</th>
<th>SECTION A</th>
<th>SECTION B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Learning Obj</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>a</td>
<td>b</td>
</tr>
<tr>
<td>1.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>1.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.7</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>3.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>5.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>6.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>