

#### ADMISSION NUMBER

## **School of Business**

Bachelor of Business Administration Semester End Examination - May 2024

Duration: 180 Minutes Max Marks: 100

### Sem VI - D1UA613T - Procurement and Sourcing Management

General Instructions
Answer to the specific question asked
Draw neat, labelled diagrams wherever necessary
Approved data hand books are allowed subject to verification by the Invigilator

- Many procurement actions are conducted electronically. Identify, what do you foresee as the next major development in this regard? When you answer this, think about reverse auctions and their impact on negotiation of price and cost.
- 2) Case Study Hewlett-Packard (HP) K3 (9) Hewlett-Packard (HP) is in an unusual position.

The function is hugely advanced – arguably one of the most advanced anywhere, and as a consequence suffers none of the recruitment and retention problems that beset many organisations.

Procurement influences about \$65 billion (\$32.3 billion) spend a year, Including materials, services, indirect and direct purchasing and logistics. It has close to 3000 procurement staff.

Direct procurement reports to the supply chain function and operates a hybrid structure with an even split between centralised and decentralised

purchasing.

However, while being a giant has its benefits, it is also at the root of its challenges.

It has only about 700 suppliers – 50 of which take 90 per cent of its Business – and success depends on strong relationships with vendors. In view of above scenario identify the advantage and disadvantage to have a giant buyer with dependence of limited vendors for majority of procurement.

3) If you were the sole owner of your garment company, would you favour the make side or the buy side of the make or buy decision?

Analyse?

K4 (4)

K3 (6)

- K4 (8) 4) You are assigned as a negotiator by a restaurant owner to negotiate for an software which will be used for administration ranging from procurement to billing, from a reputed software company in terms of cost, delivery schedule, conversion from existing system to new system, post implementation and maintenance. Examine the various factors influencing the success of negotiation in this context.
- K4 (8) 5) Two commonly utilized types of negotiation strategies that are incorporated into buyer-supplier negotiation are collaboration and competing. Compare and how they differ to each other? Examine how compromise strategy can be connected with collaboration and competition?
- K5 (10) 6) Mini case study – Tesco and CSR

Tesco monitors and assesses overall company performance towards CSR with the

following range of KPIs:

- Economic local sourcing: 7000 local products
- Environment
- Energy efficiency year-on-year percentage reduction of usage
- Water consumption
- Vehicle efficiency
- Recycling
- Social 'computer for schools': increase value of computers donated
- Charitable donations 1%
- Employee retention and training
- Supply chain labour standards training staff and suppliers (including SA8000)

Assess the strengths and weaknesses of Tesco's chosen KPIs for sustainability, considering their ability to provide meaningful insights into the company's overall performance and impact on social, environmental, and economic dimensions of sustainability."

- 7) Reverse auctions are an increasing facet of procurement. At the end of the process prices are agreed without any face-to-face negotiation. Provide your opinion on this in regard to the following:
  - (a) It is impossible to understand the cost drivers.
  - (b) The purchase was made on price alone.
  - (c) The supplier with the lowest price must cut his quality to make a profit.

K5 (10)

8) Case Study – Hewlett-Packard (HP)

Hewlett-Packard (HP) is in an unusual position.

The function is hugely advanced – arguably one of the most advanced anywhere, and as a consequence suffers none of the recruitment and retention

problems that beset many organisations.

Procurement influences about \$65 billion (\$32.3 billion) spend a year, Including materials, services, indirect and direct purchasing and logistics. It

has close to 3000 procurement staff.

Direct procurement reports to the supply chain function and operates a

hybrid structure with an even split between centralised and decentralised

purchasing.

However, while being a giant has its benefits, it is also at the root of its challenges.

It has only about 700 suppliers – 50 of which take 90 per cent of its

Business – and success depends on strong relationships with vendors.

Buy/Sell

Since HP outsources much of its production, its suppliers are frequently using

material on its behalf. However, the company is not always comfortable

handing over control for the sourcing of these components. HP say that this

would introduce elements of risk they're not prepared to take.

HP developed 'buy/sell'. They buy these items themselves and sell to the

contract manufacturer (at a different price). It may sound complex but the

material flow goes straight from the supplier to contract manufacturer. The

buy/sell transaction is purely financial; in a fraction of a second they buy at

one price and sell at another.

While HP makes no profit on the mark-up, since the contract manufacturer

sells the finished item back at a price that takes into account what HP charged for

the components, it does succeed in 'masking' HP's outlay for the original parts.

It regularly pays 5–10 per cent less for components, which has resulted in

massive savings for the company.

Affordability model

Another home-grown approach to procurement classed as best practice is a

form of demand management dubbed ABC+, or absolute best cost plus.

This takes the typical approach to procurement and turns it on its head.

The usual affordability model is a top-down approach where the street price

(what customers will pay) is the starting point. After that, you calculate the

margin you want to make and the budget you have for material, labour and

output.

ABC+, however, is a bottom-up approach where HP begins by finding the

Absolute lowest cost for a component or function. They look at the world

Market and find the cheapest way to produce it . . . they look at it and may not

like it, it may not be the best quality, they may not like the colour, or perhaps

it's not a good supply base but it is the best cost they can find.

'From that point they ask themselves what do they need to add to that very cheap component to get to what they need? What features do they need

to add, a bit more quality perhaps or colour or another performance feature?

What's the minimal cost they can add to what they need? At the end of

the day they get a component that's ABC+ and then add a margin for their

output cost.'

They challenge everything they add to that best cost, and take out all the

unnecessary over-design that does not add value for the end customer

Financial engineering

Risk is another area where HP purchasing applies a distinct process.

At HP, instead of predicting one number for demand, availability and prices

respectively, it comes up with a range for each. 'The approach they take is to look at the uncertainty by creating scenarios for demand, material cost forecast and availability. They look at all the areas

of risk and instead of drawing one line on a chart they come up with three scenarios – low, base and high. This way, they frame the uncertainty within a

range of possibilities so there's an 80 per cent chance that they will be correct.'

Negotiations

So, for example, when buying a particular part and applying the low customer demand

forecast scenario, HP gauges there is a 90 per cent chance it will need

at least X number of them. In that instance it can make a commitment to buy

at least that much from suppliers using a fixed quantity contract. Suppliers like commitments, so they say: 'If we commit can we get Something in return? A discount or better payment terms?'

### QUESTIONS TO DISCUSS

- 1. Analyze Hewlett-Packard's procurement strategies and their impact on the company's bottom line. Explain how does HP's "buy/sell" model contribute to cost savings and risk management in its supply chain operations? (5 marks)
- 2. Evaluate the effectiveness of Hewlett-Packard's ABC+ affordability model in procurement. Explain how does this bottom-up approach differ from traditional procurement methods, and what advantages does it offer in terms of cost optimization and value creation? (5 marks)
- 3. Examine the significance of negotiations in Hewlett-Packard's procurement strategy. How does HP leverage its purchasing power to negotiate favorable terms with suppliers, and what impact does this have on its supplier relationships and cost structure? (5 marks)

K6 (12)

Two suppliers X and Y provide your company with critical supplies of starting materials for the manufacturing of the product Z. Last year, you managed through the tender system to procure an engine from supplier X with a dream prize equal to 4,00,000 USD. While you recognize that this price was significantly discounted, you cast doubt over the possibility to replicate that this year as you recently have announced another bid for both suppliers about the need for another similar engine. You discover that you can easily build from scratch that the same engineer with a cost equal to 4,50,000 USD. At the same you managed to know informally that the both suppliers are willing to submit separately an offer with at least 50% increase the price you had last year due to material price mark up in the market. You also know that the supplier X is in the great need of this deal this year as it was a stagnant market with no other buyers for seven months. Supplier Y and X also prefer cash as they had cash flow issues which you can provide for this tender.

You are required to address the following Discussion Questions (6 Marks for each questions)

- a. Propose what would be your negotiation strategy? and why?
- b. Discuss your expectation about the negotiation styles from supplier X and Y.
- c. Discuss the BATNA of Supplier X and Y.

9)

(6

Read the case carefully and answer the questions given below Marks for each questions)

Case Study: Tech-Bean Systems Private Limited – Managing Monopolistic vendor

Introduction

It was August 2019, and Mr. Vikas Gandhi, Director at Tech-Bean Systems Private Limited was glad to win the contract to install Extra Low Voltage Systems (ELVs) at XYZ Ltd. Tech-bean was based in Pune, India, which provides solutions related to home and building automation systems. His happiness, however, was short-lived as Mr. Gandhi soon realised that this project involved a lot of challenges. The contract required Tech-Bean to procure one of the components named "Structured Cables", from a company-mandated vendor from Italy named A&R. This product, which comprised 40% of the total value of the contract, had to be procured from the Italian monopolistic foreign vendor, which complicated the timely execution of the project within the budgeted costs.

# XYZ Ltd

XYZ Ltd. was setting up a plant to manufacture fighter plane assemblies at Indore – a city in the state of Madhya Pradesh, India. The company was approaching vendors to sub-contract different jobs. Under Mechanical Engineering and Plumbing (MEP), the company intended to sub-contract the ELV systems (extra low voltage systems). It had appointed a consultant for MEP, who prepared the tender document, which included the specifications of the work and the Bill of Quantity of each line item. The consultant also specified approved makes/brands for every system/component. While three to four options were given for most of the systems and components, only one make/brand—A&R (an Italian brand)—was specified for one of the systems named, "Structured Cables". XYZ floated a tender. The first round was a technical specification round. Qualifying vendors were eligible for price comparison. The lowest bidder was assigned the project.

Tech-Bean Systems Private Limited

Tech-Bean was an expert provider of solutions related to Home and Building Automation Systems and offered solutions connected with Building Management Systems, CCTV Cameras, Fire Alarm Systems, Parking Management Systems, Lighting, Access Control Systems, and Automated Boom Barriers. Tech-Bean approached XYZ Ltd. and expressed interest in bidding for the ELV systems.

Background of the Context Usually, when a company decides to construct a new manufacturing plant, the various jobs are divided and sub-contracted out to different vendors, for example, Mechanical Engineering and Plumbing (MEP), Civil, Heating, Ventilation and Air conditioning (HVAC), Parking Management Systems, Building Automation, and other systems. The company normally hires

consultant/s, who guide the company on the specifications of each of these systems and help in preparing the bill of materials. For critical systems, they very often specify one or a couple of make(s)/brand(s) for the material/component. Once the technical specifications are agreed upon, appropriate vendors are contacted. The vendors then bid for the contract. If the technical specifications are met by all the bidders, then the price is compared, and the order is given to the lowest bidder.

The Challenges Faced by Tech-Bean

X&Y was planning to expand its business, by putting up plants in various other locations in India. Tech-Bean was interested in building a long-term relationship with this company with the expectation of getting future business. But this journey would not be straightforward as this project involved the purchase of "Structured Cables", which comprised 40% of the total cost of the ELV project from a foreign vendor on three months' advance payment. The project cost could overshoot the budgeted figures making the project unprofitable for a combination of reasons e.g., if the project got delayed, or the rupee depreciated at the time of releasing the purchase order, or the foreign vendor did not supply the material on time and any other such reasons. These factors would have a significant impact on the profitability of the contract and hence meant that the project had to be planned well, after anticipating all the possible costs and likely profitability under uncertainty.

Apart from Tech-Bean, five other companies bid for the ELV system tender. All the bidders had to necessarily approach A&R for procuring the "Structured Cables". A&R was one of the most reputed brands in its category. The company did not have any presence in India, though they had supplied material to one select client in India. Tech-Bean's team contacted A&R for the requirement. A&R shared that they had a big pipeline of orders to fulfil and would require 3 months to deliver the product post receipt of the purchase order. They were not keen on any price negotiation as they knew that their brand had been specified as the only brand for the product in the tender document. The price that they guoted was substantially higher than local brands. Tech-Bean undertook detailed cost planning and budgeting to ascertain the price at which to bid, ensuring that all possible costs related to the project were included considering an optimistic and pessimistic situation. The margins for the optimistic scenario were 17 percent and the margins for the pessimistic scenario were 10 percent. The bid price, as calculated by Tech-Bean turned out to be higher, as compared to the competitors based on market information. However, Tech-Bean took a forward call and advised the contract team to match the price by biding at a 12 percent profit margin (optimistic scenario) and 6 percent profit margin (pessimistic scenario). As a standard operating procedure, Tech-Bean picked up business at margins equal to or

higher than 15 percent for orders greater than INR 10 million. This order was an exception, purely in order to build a long-term relationship with the client.

Tech-Bean finally won the contract, but the dilemma remained. Would the company be able to execute the project successfully without incurring losses? Would the project kick-off on time? Would A&R deliver the "Structured Cables" on time? Tech-Bean had undertaken a detailed investigation and charted out steps to ensure tight control over the project, to ensure its timely and satisfactory completion. While planning the bill of material for the project, it was evident that the procurement team had to especially plan for the "Structured Cables", as other products were regular items for which the vendor/s, delivery schedules, and pricing were known. A meeting was scheduled, which was attended by the procurement team, finance team, and the execution team to ascertain the concerns and the actions to be taken regarding the procurement of the "Structured Cables", which were given as

- 1. The delivery led time to procure "Structured Cables", from A&R was 3 months after the release of purchase order. 10 additional days had to be planned for the material to reach the site of the project from Italy, as the payment terms were Free on Board (FOB) Italy (closest port). So, the total time required to procure the material was 3 months 10 days, assuming no delay.
- 2. The product was a made-to-order item, with a long delivery schedule. Therefore, it was critical to estimate the required quantity of the cable with as much precision as possible. Any additional units required would delay the project by approximately 3.5 Months. It was decided that a team of engineers would be sent to the project site to conduct a detailed analysis of the requirement of the cable, based on the drawings and site survey. 10 percent additional units would be procured to take care of additional units required in case of emergency.
- 3. The payment terms of the contract were 100% advance payment along with the purchase order. The payments would have to be made in US dollars. Import costs would go up if the Indian Rupee depreciated by the time the purchase order was released. The cable would be required towards the end of the project phase, which was estimated to be 8 months from the kick-off date.
- 4. There was a possibility of delay in delivery of the cables. In such a situation, the complete project would get stalled.
- 5. If the project itself got delayed which very often happens with large projects then the cable delivery could take over a year. In such a situation, the price established in the contract or the purchase order would no longer remain valid and fresh negotiations would need to be undertaken, which in turn would significantly increase the possibility of increased prices and business risk.

6. While executing the project, there could be requirement for extra cable. A&R would probably not give priority to Tech-Bean in terms of providing prompt delivery for the additional requirement as it already had a big pipeline of pending orders to manage.

Conclusion

Procurement teams play a key role in the acquisition of materials required for executing projects for an infra structure company. They strive to get the best possible deals while procuring materials for a project. This is undertaken through price negotiations and supplier relationship management initiatives that foster trust, collaboration, and reduction in the overall supply chain cost. But this power can shift from the buyer to the seller such as A&R who was listed as the sole supplier for the component in the contract. Managing vendors is a difficult proposition, especially in the context of a situation where one is dealing with a monopolistic foreign vendor. When a company bids for a project, it budgets its cost under various heads and it is extremely critical for the project manager to ensure that the costs remain within budget.

Discussion Questions (6 Marks for each questions)

- 1. Discuss the problem that Tech-Bean needs to deal with? State the key issues discussed in the case?
- 2. Discuss the various scenarios (apart from the one mentioned in the case) that compel an organization to approach/choose a monopolistic vendor?
- 3. Discuss how can a procurement teams forge more productive relationships with vendors, particularly when monopolistic vendors take power away from the buyer?