Case Study
Toyota Motor Europe

Introduction

- Toyota has their UK vehicle manufacturing plant in Derby where they build the Avensis and Corolla models. Engines are manufactured in Deeside, North Wales.
- The combined investment in these sites is over £1.7 billion, with over 5,500 people employed.
- Toyota currently has 5% of the European car market.

<u>COMMERCIAL</u>

Risk Management

- The capital commitment and investment required by Toyota suppliers requires long - term relationships to be built between themselves and Toyota.

Procurement Strategy

- The Procurement strategy is considered three years prior to a new model production. New technological advancements and the correct suppliers are identified and invited to bid.
- There is early engagement with local and Japanese engineering groups to evaluate existing suppliers and related technology. At this point, Toyota Logistics also ensure they have a suitable infrastructure in the supplier country.
- A Product Specification is obtained from the engineers and whilst exact specifications are difficult to obtain a good specification early on means less risk of cost growth. Toyota also looks to fix unit cost elements with suppliers at this stage.
- It is essential for the buyer to understand the market. They must be able to look for new potential suppliers and analyse the performance of all suppliers.

Performance Management

- Large numbers of design changes can occur between design and manufacture. Change is managed via an ‘open book’ policy whereby Toyota understands the structure of the suppliers costs. Toyota insists on visibility of the supply chain through to second tier.
- The supplier profit margin is ring fenced and any variances resulting from design changes are accommodated within the overall economics so as to protect this margin.
- Toyota’s procurement department utilise a graduate intake that receive ground-up training in Toyota methodology and gain knowledge of reasonable costs. In-house comparator studies are also used; Toyota has a wide, international supplier network which provides many opportunities for benchmarking.
- There is tremendous pressure in the car market to reduce costs. It is easy for suppliers to hide their margin as they can allocate costs in many different ways. Toyota uses its trained buyers, with their detailed knowledge of cost structures to confirm that quoted costs are reasonable.
- Early engagement with suppliers is made in the case of any dispute resolution with Toyota seeking commitments rather than guarantees. Toyota does use penalty clauses in their contracts but only invoke them as a last resort; the Purchasing Manager has not seen Liquidated Damages (LD) invoked in 14 years of working at Toyota. Toyota wish to have the widest possible pool of potential bidders and seek to resolve disputes constructively. The use of LD can end a workable relationship.
- Typically, where an LD claim is justified, the supplier management are brought in and the situation is discussed. Toyota will state their costs incurred and come to an agreement on costs which are allocated in line with who has incurred them.
- Toyota maintains contact with suppliers during pre-production work and monitors their plans. Any problems that arise are discussed and resolved openly by the Purchasing Manager.

- Toyota's relationships benefit from a more Japanese approach to growth than a typical western view. A Japanese view emphasises longer term development growth with consistent, long term relationships, this improves business year on year and leads to cost reduction. A western view is more short term and influenced by shareholder's quarterly returns.
- Toyota contracts do not have standard dispute resolution clauses but escalation agreements are in place. It is difficult to independently arbitrate so Toyota do it themselves. Toyota rarely revert to references to specific contract clauses. Instead, responsibilities on each side are spelt out. For example, if Toyota makes design changes, they agree reasonable price changes. If cost is in dispute, Toyota can access suppliers' factories/processes to confirm realistic costs.

CULTURE

Relationships

- Toyota has built up a strong corporate reputation over time which facilitates the building of good relationships. Although Toyota may rotate key staff on a 2 to3 year basis, there is an underlying consistency which allows relationships to last over time. Individuality is respected but the overarching Toyota approach remains consistent in the way they work with suppliers.
- Toyota has empathy with supplier problems as they are manufacturers themselves and if a supplier escalates a problem, they know Toyota will deal with it consistently.
- As good teamworking is fundamental at every stage, Toyota explains their way of doing business to potential suppliers.
- Toyota have a 'bad news first' relationship with their Supply Chain. Suppliers are encouraged to make immediate contact in the event of problems and Toyota endeavour to assist.
- Toyota feel there is rarely a need to resort to legal action which could bankrupt a supplier. Toyota reserves the right to charge suppliers for expenses such as needing to halt the production line. However, they may only charge a portion. Suppliers are likely to receive more favourable treatment if they provide early notice of a problem.
- Toyota wants their suppliers to be sustainable. They invest in educating their suppliers on techniques and business knowledge over a long period, always maintaining open dialogue.
- Mutual trust is a key principle of good supplier relations. Guarantees can be considered worthless if, for example, the Managing Director or ownership of a supplier changes. Toyota expects consistency of policy and agreements irrespective of management or ownership changes, within the context of a long term relationship.
- Unless severe quality issues occur, a supplier can expect to retain business for the duration of a model lifespan (around 5 years). Toyota use General Purchase Agreements which are more philosophical than legalistic. Toyota prefers Terms & Conditions discussions to be retained within a commercial framework.

Supply Chain Management

- All potential suppliers have the opportunity to bid for new business at model changes, even if they are not a 'preferred' supplier due to past performance.
- Toyota must be convinced that the supplier has given a realistic bid at which it can produce sustainably. As Toyota will need to hold the supplier to the contract for around five years, they are willing to walk away from a potential supplier who has quoted unrealistically low costs.
- Toyota visits the plants of potential suppliers with a team consisting of a Quality Engineer, Production Tooling Engineer and Logistics Specialist. All systems are tracked from goods-in to final output and a quality evaluation is carried out. A final opinion is issued using a traffic-light style system with three grades: Acceptable (invited to bid), Some Concern (invited to bid but concerns are raised), Unacceptable (not invited to bid).
- Toyota view selection of the right supplier as key to smooth relations. A pre-sourcing selection meeting is a useful tool. During such meetings, Toyota cover scenarios which can provide a feel

for the supplier’s company culture. If the supplier’s commercial strategy is at odds with Toyota’s, there is little point proceeding as the relationship is unlikely to work.

- Toyota considers it normal practice that unsuccessful bidders incur costs of tendering. Supplier overhead costs are expected to contain an amount to cover the cost of any contracts their company does not win. Potential suppliers should always be capable of winning the business and are not invited just to make up a certain number of bidders.
- Toyota’s profit philosophy is to set a target price for a vehicle and a target profit. The profit target is the starting point and a cost structure is produced which accommodates it. If the target cannot be hit, the specification must change; there is mutual ownership of this process. To enable successful outcomes, the technical department must work closely with Purchasing. In Western Europe, it is more usual to start by building up costs and designating the remainder as percentage profit.

Incentives

- On a large project, Toyota incentivise by using stage payments linked to clearly defined, tangible milestones.
- Fixed Price Lump Sum is Toyota’s preference on large construction projects. Therefore, the specification provided to contractors must be accurate. Toyota supplies a bill of quantities (as a guide) and if the supplier changes the quantities it is at their risk.
- Toyota would give Bills of Quantities rather than a Target Price. Prices can be very flexible depending on the market at the time required.

VALUE ENGINEERING

- Toyota has dedicated tooling which is expensive to change once it is laid down in the prep phase. Value Engineering (VE) involves making changes before tooling occurs.
- VE is engineering in the most cost effective way. A simple example of VE is the production of a component that does 2 jobs rather than producing 2 different components to do those 2 jobs. Suppliers are asked to contribute to generating such VE ideas.
- Value Analysis (VA) involves things that are less structural and easy to change eg removing pieces of foam from the vehicle under construction.
- For Toyota’s new Corolla, 1800 new VE ideas were received from Suppliers. VE ideas are requested at bid, after the spec has been issued. It is requested that the bid is based on the spec with accompanying details of VE ideas, and then Toyota deduct valid VE reductions from the bid price.
- Below is an example of the approach to inviting bids for a large civil construction project:
    1. Build up specification and perform pre-study.
    2. Invite all potential suppliers to a meeting and present the specification so they all receive the same message. This is followed by a tour of relevant section of plant with any necessary data supplied to potential suppliers (eg soil data for a civil construction project).
    3. Following this, there is a period for questions to be asked and answered.
    4. Proposals and Value Engineering (VE) ideas are then submitted by bidders. Toyota may own VE ideas contained in an unsuccessful bid if they are common knowledge ideas. (VEs relating to parts are not shared due to respect for IPR).