CREATE COMPETITION WHERE MARKET FORCES DON’T WORK!

MARKET DESIGN IN THE AUTOMOTIVE INDUSTRY

Market Design is commonly understood to provide perfectly efficient and effective negotiation strategies and designs for Procurement situations, but that is just the tip of the iceberg. Market Design also provides answers to optimise the whole sourcing process of organisations and structures (but that would be going too far now!).

A key success factor for sourcing is implementing and using competition in negotiations. Market Design provides the intelligence on how to utilise competition in the most effective way; rest assured that it won’t involve inviting as many suppliers as listed in the telephone directory. Organisations do, however, benefit significantly from a higher level of competition, particularly in the automotive industry where the supposed negotiation power is perceived as high for the OEM and where innovation and performance are key success factors.

What is competition?

Competition is the ultimate lever in negotiations to achieve the best price-performance ratio to drive innovation and to avoid potential dependencies on a particular player. Unfortunately, competition often doesn’t come easy but instead is the result of persistent, strategic, hard work.
But what is competition in Procurement? The necessary condition of competition is the existence of a market in which there is more than one potential market participant aiming for a certain market share. Furthermore, there is a sufficient condition of competition which implies that these participants must be deemed winning by the contracting party and need to have a reasonable ambition to win and an anxiety to lose. A lack of competition is mostly due to the sufficient condition not being fulfilled.

A simple example to illustrate the rather technical definition above: For their signature jelly, a manufacturer only uses a very specific size and colour of apples which was used in the initial grandmother’s recipe, that only one farmer grows. Consequently, every year the jelly manufacturer faces negotiations without any alternative but to buy from that specific farmer. So, although there are many types of apples, innumerable farmers growing apples and a global market, the manufacturer’s method to ensure quality equates to an active decision against competition and giving up a significant proportion of its margin. While this example describes an artificial situation with obviously unreasonable sourcing restrictions, it illustrates the challenges which many professionals.

**Competition within the Automotive Industry**

Armed with this general definition of competition in Procurement, we next take a look at the automotive industry; a prime example of a market where competition is perceived to be very intense. On the one hand we have the car manufacturers competing against each other in selling their products to consumers, and on the other hand we have many suppliers competing for delivery contracts. Thus, roughly speaking, both the necessary and sufficient condition of competition seem to be met and nothing should hinder full competition.

On closer inspection, however, the maintenance or even enhancement of this competitive environment is where the above-mentioned hard work comes into play. Although Procurement organisations in the automotive industry benefit significantly from factors such as the commitment to long lifecycles, clearly defined scopes and mostly stable volumes, there are restrictions that can have a significant negative impact on the degree of competition (on both conditions, sufficient and necessary): multiple variants of parts, complex logistic supply chains, high performance requirements, regulations, IP licenses and high market entry barriers to name but a few.

**Market design – how to create competition**

Over the past decade, sourcing functions of leading car manufactures have shown that Market Design is the most effective approach to tackle restrictions and threats to competition in the automotive industry. In the following examples we will introduce some of the fundamental concepts of Market Design and illustrate their application to foster competition.

Definitions:  

- **Market Design** = Optimising the outcomes of interactions such as negotiations and tenders from a given perspective (i.e., buyer or bidder) by setting rules and considering bidders’ incentives from a game-theoretic perspective.

- **Total Value of Ownership (TVO)** = Total cost of ownership (i.e. unit prices, investment costs, etc.) + considering additional value drives such as relationships, innovation, reliability, flexibility related to a specific supplier or a supplier’s solution.
**Competition through Comparability**

To start with, let us ask the following question: How to make the right sourcing decision? By choosing the best business case in terms of Total Value of Ownership for your organisation. While this sounds like a no-brainer, this decision often poses a profound challenge.

But how to decide what the best business case is? For one thing, suppliers’ quotations themselves are often not directly comparable, due to suppliers’ different pricing structures. For another, when purchasing any automotive component, there may be some non-monetary preferences: you would rather buy the lighter, smaller and better performing solution for which you might be willing to pay some extra pennies. These non-monetary factors, besides the pure commercial quotation, must be incorporated into your decision making in order to make the optimal decision for your business.

Market Design solves both challenges; full comparability of commercial quotations and non-monetary factors by formalising an incentive-based, transparent quotation process and implementing a committed monetary bonus/penalty evaluation scheme. As a result, the level of competition increases significantly, and it comes with another positive side-effect: by transparently considering quality and performance criteria in the decision making, suppliers are incentivised to further improve their attractiveness by improving on these aspects, which could enable, for example, long-term access to innovation or more light-weight solutions being offered.

**Competition through Commitment**

Assuming comparability is implemented, internal and external credibility and assertiveness, i.e. commitment, is required to build the reliable reputation of an organisation and so to drive competitiveness of suppliers. The following example of lacking commitment demonstrates this:

Imagine you are a sales representative. Would you really participate in an expensive (in terms of time and effort) RfQ process if you had serious doubts whether you had a real chance of winning and were probably only being used as a price driver? How many times does a buyer ask for a very last best offer? How will you know when it really counts?

To establish commitment within an organisation, it requires internal alignment of all parameters relevant for an awarding decision. This means commitment to straight supplier communication and accepting the outcome of the final negotiation according to the predefined rules of the awarding process. Suppliers therefore know what scope they can win and what they need to do to win. This transparency regarding the rules and the acceptance of the result are the strongest motivators for a supplier in a negotiation, given the outcome solely relies on their offered price-performance ratio.

Assuming that comparability and commitment are implemented, we would like to go even further and discuss some less obvious, but just as effective, dimensions of Market Design.

**Competition through Design to Competition**

In technologically challenging and innovation driven projects, a significant number of suppliers or solutions are often excluded in advance of the final negotiations. From a Market Design perspective, it would be preferable to decide on exclusions within the final negotiations: “May the best-price-performance ratio win”!
With *Design to Competition*, the focus is on identifying the most attractive solution from a holistic perspective. Instead of competing based on a fixed and rigid set of requirements and specifications, suppliers compete by offering different solutions to a given problem.

*In an intuitive picture there are plenty of possibilities to cross a big river, e.g. a wooden bridge, a boat, etc. If you only ask for bridges, you will miss out on many options which are potentially more effective and efficient.*

Given these different solutions, you need to evaluate and consider all costs, benefits and relevant implications on the business case in order to make the right sourcing decision: e.g. implication on sales figures, resulting weight economies, changes in assembly space. The basics of economic engineering in the framework of a bonus/penalty evaluation are used to establish comparability of all these solutions, ensuring openness of the organisation towards differing solutions until the very end and finally enabling the right decision to be made.

**NB:** Not only does *Design to Competition* open the door for a higher level of competition, but for particularly innovative components and commodities it incentivises suppliers to use their own potential to be innovative to obtain a competitive advantage throughout the competition, which again increases access to innovation.

### Competition through Avoidance of Exposure

Finally, we look at a more sophisticated factor which negatively affects competition. Often suppliers fear the risk of exposure when disclosing information regarding pricing details in the form of price-breakdowns, or when accepting a price level considerably lower than in past contracts. This is fear of exposure to the customer (i.e. OEM or 1st Tier) and also towards market rivals.

Exposure towards the customer means, for instance, revealing a supplier’s competitive advantage (production processes) by disclosing detailed price breakdowns, which could mean losing their unique position. It could also mean, when a supplier quotes a certain price level in order to win the business, that the customer requests the supplier to implement that particular price level for comparable booked business. In case of exposure towards competitors disclosing prices (e.g. by accepting a price in an auction), this allows competitors to learn about the supplier’s price level, which might lead to a lower starting point for initial quotes in the next project.

In these particular cases, suppliers would try mitigating these risks by participating only in RfQs and negotiation formats with limited aggressiveness, which leads to a lower level of competition overall.

As a result, Procurement organisations must learn to recognise these situations and react accordingly: choose adequate RfQ structures and negotiation formats that first encourage these suppliers to participate and even compete to their full potential, and that secondly are just as effective and expedient. Market Design will tell you how.

### Conclusion

The benefits of competition for attractive sourcing conditions cannot be disputed. As a result of collaboration and of differing incentives or targets, organisations tend to significantly reduce the effectiveness of competition compared to its actual potential. It is the inherent task of Procurement to position itself as an advocate of competition. In addition to basic principles such as “early involvement”, market design offers new opportunities to meet this demand. By adopting a long-term, multilateral and value-oriented perspective, positions can be defended, and unused potential identified.