

## WHAT ARE YOUR ANNUAL QUOTING COSTS?



As is often the case in industry, including in the electronics manufacturing industry (EMS), the costs associated with generating quotations are often taken for granted. It's all just part of it. No quotations, no orders, no work.

However, the fact is that the actual total annual costs associated with generating quotations are often higher than expected and these have a significant impact on the net operating profit. Given the mostly narrow margins in the world of electronics contract manufacturing, it is worth studying the annual quoting costs in broader detail.

Quote generation takes time. Both in terms of the hours spent and in terms of lead time. This is an expensive process because, usually, the most experienced staff deal with processing the bill-of-materials (BOM), analyzing the availability and costs of material, analyzing the production methods, choosing the right workflows and analyzing the production costs. But the total costs amount to more than this!

The actual annual costs for quotation generation are much higher than first thought. Especially when the impact of incorrect choices and errors on winning orders and on later production are taken into account, the (invisible) bill will soon increase.

## The costs of (added) errors

The quotation process can be error prone, but the considerable pressure from customers for a quick RFQ response will undeniably increase the chance of making additional mistakes. All EMS providers are, rightly so, very reluctant for this to happen, because of the increased risks involved.

Firstly an important but trivial costs source:

### • The costs of errors

It is a well-known fact that customer data provided for an RFQ, especially if the product is still under development, usually contains errors. In cooperation with the customer, a lot of time and attention is spent on intercepting and correcting those errors, which in some cases is a time-consuming process, but mistakes are still sometimes overlooked. Also, the repeated process of new dataset revisions in a development process generates additional costs and the risk of errors increases. Additional mistakes during the quote preparation process, such as mistakes or interpretation errors by the quoting engineers, are a nightmare for every EMS. They are usually discovered too late and can have costly consequences.

But which costs are usually not included in the annual quoting costs:

### • The costs of production calamities

Perfect orders deliver the most. But unfortunately, the situation is often far from perfect. Potential production problems that have been overlooked during the quoting phase can have catastrophic consequences for the profitability of a production run. The costs of calamities can be high; how high is often unclear. It is difficult to ensure that all related costs are transparent and by then, the problem has occurred anyway. But the fact is that the costs of manufacturing calamities directly impact the net operating result. Every EMS experiences large or small-scale calamities a few times a year. Some will even remember the negative impact of these years later.

### • The costs of forgotten cost items

Forgotten costs are almost inevitable, unless a detailed costs checklist is used. Discussing forgotten costs with the customer afterwards is difficult and certainly not always successful. If the customer does not agree with a settlement, the extra costs must be absorbed or the entire order will go to the competition. In any case and whatever the outcome of the discussion with the customer, the quoting costs increase due to the additional time that sales or account management has to spend on this process.

### • The costs of missed orders

The price tag of a missed order comprises not only the sum of the commercial costs, but also the costs of creating the quotation and possibly the costs of re-evaluating the quotation to understand why it went wrong. Missing the first order from a new prospect may mean missing the chance of a long-term and fruitful relationship. Missing an existing customer order may mean the introduction of a new competitor. How much does that amount to?

### • The costs of “wrong” orders

Each production plant has specific characteristics in terms of production efficiency and quality. Only a certain type of product in certain series sizes can be produced with maximum efficiency, quality and yield. In those cases, production resources and personnel perform best and achieve the maximum return. Orders for the right type of product and the right production volume that fit perfectly with the production resources and the knowledge and experience level of the engineers should therefore never be missed.

But let's face it, orders for products or series that do not fit well can hardly be avoided. Not only do they block the production capacity for more profitable orders, but they also generate lower yields and, in the worst case, can cause production and quality problems in such a way that production becomes loss-making. Sometimes the quality problems become so great that even the customer relationship is at stake. The costs of such a situation can hardly be overestimated. Detecting such scenarios in customers' RFQs require a lot of experience and knowledge of operations.

- **The costs of wrong margins**

The aforementioned points largely determine the risk that the EMS runs when issuing a quotation. The less detecting and analytical power the internal quote creation processes have, the greater the uncertainties are about the correctness of risk assessments and cost calculations. The risks can, to some extent, be compensated by better margins. But if the exact levels of the risks are not known how can the correct margins be applied? If the margins are too high, you will lose orders that you absolutely should have won. If the margins are too low, you earn too little or you get orders that you would rather not have at all. A devilish dilemma.

The concept of "annual quoting costs" therefore deserves a broader definition.

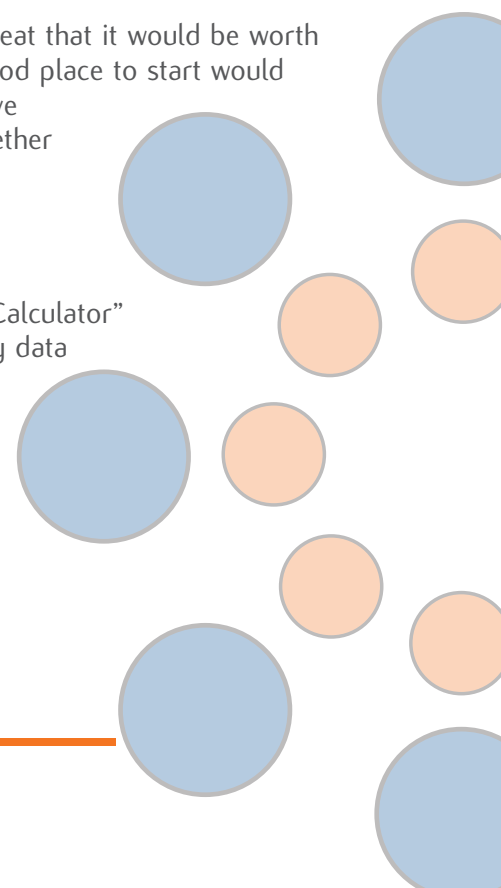
It is clear that the actual cost impact of the internal quoting system, due to the accumulation of follow-up costs and costs of missed orders, is much greater than simply the direct costs associated with generating quotations. In addition, the use of manual or very low automated processes in relation to the often highly automated production processes is outdated. It makes the quoting process a persistent bottleneck in the supply chain. The direct quoting costs are not only too high, but the process is far too slow; an aspect that has not yet been mentioned. The aspect of slow quotes can have very different and far-reaching consequences but is not taken into account here. The impact of slow quotes alone can be so drastic that we have dedicated a special white paper to this ([Slow quotes cost a fortune](#)).

The fact that a quoting system is often a low automated process, or is not automated at all, is not particularly strange. The complexity of the cost analyses in the quoting process in particular is immense, due to the large quantities of variables and parameters both in terms of material costs and production and testing costs. Until recently that complexity made automation extremely difficult.

But there are important developments in this area. With the help of modern software tools and techniques, full automation of the quoting process for EMS providers has become a reality. Modern quoting tools have a major impact on the speed, accuracy, efficiency and consistency of the quoting process and therefore on the costs involved. The results of the sales and account management process can also greatly improve.

The benefits of automation of the quoting process in terms of the costs are so great that it would be worth every EMS looking in more detail at the current costs and possible savings. A good place to start would be for the EMS to analyse its own internal annual quoting costs as this would give an indication of the actual costs involved. This would also immediately show whether automation is financially feasible and how it could contribute to the annual company result.

However, a calculation of the annual quoting costs is fairly extensive. That is why we have built an online and freely accessible "Annual Quoting Cost Calculator" that allows you to make a quick calculation based on your own internal company data and estimates, plus it gives you an insight into the actual annual quoting costs. Various scenarios can be calculated.



Subsequently, using a conservative calculation method, we also indicate what the expected annual savings may be when using a partially or fully automated quoting process.

The “Annual quoting cost calculator”, with a clear explanation, can be found on our website [www.quotearchitect.com/aqcc](http://www.quotearchitect.com/aqcc)

The calculator is freely accessible and anonymous. Your data will not be recorded.

For more information about automating the quoting process of EMS providers, please visit our website [www.quotearchitect.com](http://www.quotearchitect.com)

Remember, the revenue from the improvements and savings from your quoting process can be added directly to the annual result. The costs associated with automation are usually recouped in just a couple of months.

