

## **7 Trends in the Order Process for Complex Products and Services**

In this chapter, we look at some surprising statistics from high-tech industries that pinpoint some recent (and still current) problems. We then continue to discuss solution trends in processes and in Information Technology.

### **7.1 Extreme Engineer-to-Order Industries (a Few Facts from a British Survey)**

Efficient customization can be difficult to achieve in high-tech or knowledge-intensive sectors because of the size and scope of customer orders, the scarce and expensive specialist hours, and an increasing complexity and personalization of proposals. Some recent industry surveys have been conducted in this field, starting with one by Benchmark Research UK a few years ago, on behalf of Cincom Systems. Bidding for Business (Benchmark Research, 1996) was a study of British industry with specific emphasis on companies providing complex products and services; a little later, a similar American study by the Gartner Group arrived at similar conclusions. Benchmark contacted product development and marketing directors at 180 of the largest companies developing complex products on a contract basis. The high response rate of 73% in itself made the study unique<sup>1</sup>. The total business value of the industries who responded amounts to tens of billions GBP a year and the Benchmark study radically raised the visibility of the costs involved in managing complexity.

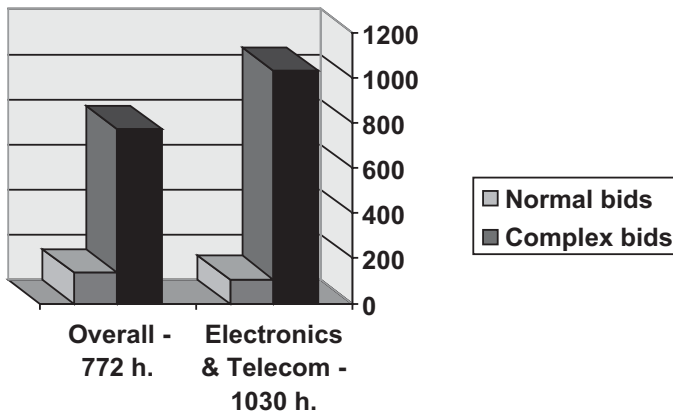
#### **7.1.1 1030 Hours per Bid – Harvesting Just 38%**

The most important trends to the respondents were increased globalization and a rapidly growing demand for variance and customization, making the lead-time for bid preparation increasingly critical in contract acquisition. Furthermore, communicating customer-data downstream to production

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<sup>1</sup> The figures are quoted here with the kind permission of Cincom; **for any replication, a new permission is required.**

planning and to manufacturing was the key to hitting delivery dates, keeping proposed prices and achieving planned profits. Half of the respondents had *lost contract opportunities* because of proposal delays; only less than 4% had never faced problems in hitting proposal-dates. An average project contract amounted to 2 million GBP revenue, 12% of which was already spent in advance by an average of 8-9 key specialists in preparing the bid. The industry average of contract bid-preparation time was 138 (at normal complexity) to 772 (high complexity) staff-hours per bid, electronics and telecom constituting the most extreme sector with an industry *average* of 1030 (high complexity) staff-hours per bid. Crucially, 62% of these hours were in vain, as just 38% of the bids actually resulted in winning orders (in electronics and telecom, this hit rate was 41%; nevertheless that still makes an industry-sector average of 2512 *hours* of complex-bid preparation *per real order*). In general, larger companies suffered the biggest problems in both staff-hours and in hit rates; up to 2881 hours were spent by the largest companies to construct a complex bid. Some readers might find Benchmark's figures surprising whereas others would claim "it can't happen here"; however, several of our contacts in the European electronics industry consider 1030 hours for contract bidding as relatively fast and "below average".



**Figure 7-1:** Costs of complex bids.

Benchmark Research discovered several revealing figures – here, an industry average of hours spent to construct a bid; on top of this, large bids taking an average 2881 hours were reported (by the largest enterprises in the survey).