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Computron, Inc. (2006)

In July 2006, Thomas Zimmermann, manager of the European Sales Division of Computron, was trying to decide what price to submit on his bid to sell a Computron 1000X digital computer to König & Cie., AG, Germany's largest chemical company. If Zimmermann followed Computron's standard pricing policy of adding a $33^{1}/_{3}\%$ markup to factory costs and then including transportation costs and import duty, his bid would amount to $1,244,800; he feared, however that this would not be low enough to win the contract for Computron.

König had invited four other computer manufacturers to submit bids for the contract. A reliable trade source in Zimmermann's opinion indicated that at least one of these competitors was planning to name a price in the neighborhood of $872,000. This would make Computron's normal price of $1,244,800 higher by $372,800, or approximately 43%. In conversations he had had with König's vice president in charge of purchasing, Zimmermann was led to believe that Computron would have a chance of winning the contract only if its bid was no more than 20% higher than the lowest bid.

Since König was Computron's most important German customer, Zimmermann was particularly concerned over this contract and was wondering what strategy to employ in pricing his bid.

Background on Computron and Its Products

Computron was an American firm that had, in the winter of 2002, opened a European sales office in Paris with Thomas Zimmermann as its manager. The company's main product, both in the United States and Europe, was the 1000X computer, a medium-sized digital computer designed specifically for process control applications.

From 2002 to 2005, the market for digital process control computers kept growing rapidly. These computers were substantially different from those used for data processing and engineering calculation. They were generally produced by specialized companies, not by the manufacturers of office and/or calculation-oriented digital computers. These companies also were different from those that produced analog process control computers (the units traditionally used for process control).

Professor John A. Quelch prepared this revised case as the basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. This revision updates Professor Benson Shapiro's 1979 revision, "Computron, Inc., 1978." The original version, entitled "Computron, Inc.," was written by Ralph Sorenson for l'Institut pour l'Etude des Méthodes de Direction de l'Entreprise (IMEDE), Lausanne, Switzerland, copyright 1965. The names of all individuals and companies have been disguised.

Digital computers were classed as small, medium, or large, depending on their size, complexity, and cost. Small computers sold in the price range up to $320,000, medium computers from $320,000 to $2.4 million, and large computers from $4 million to $24 million.

The Computron 1000X was designed specifically for process control applications. It was used in chemical and other process industries (oil refining, pulp and paper, food manufacture, and so on) as well as in power plants, particularly those for nuclear power.

In addition to its 1000X computer, Computron manufactured a small line of accessory process control computer equipment. This, however, constituted a relatively insignificant share of the company's overall sales volume.

During its first six months the European sales office did only about $4,400,000 worth of business. In the 2005-2006 fiscal year, however, sales increased sharply, totaling $20,000,000 for the year.[1] Computron's total worldwide sales that year were roughly $176,000,000. Of the European countries, Germany constituted one of Computron's most important markets, having contributed $4,800,000, or 24%, of the European sales total in 2005-2006. England and Sweden were also important, having contributed 22% and 18% respectively. The remaining 36% of sales was spread throughout the rest of Europe.

Computron computers sold to European customers were manufactured and assembled in the United States and shipped to Europe for installation. Because of their external manufacture these computers were subject to an import duty, which varied from country to country. The German tariff on computers of the type was 17½% of the U.S. sales price.

Prompted primarily by a desire to reduce this import duty, Computron began constructing a plant in Frankfurt. It would serve all 15 countries in the European Community and was scheduled to open September 15, 2006. Initially it was to be used only for assembly of 1000X computers. This would lower the German import duty to 15%. Ultimately the company planned to use the plant to fabricate component parts as well. Computers completely manufactured in Germany would be entirely free from import duty.

The new plant was to occupy 10,000 square feet and employ 20 to 30 people in the first year. Its initial yearly overhead was expected to be approximately $1,200,000. As of July 2006 the European sales office had no contracts on which the new plant could begin work, although training of employees and the assembly and installation of a pilot model 1000X computer could keep the plant busy for two or three months after it opened. Zimmermann was somewhat concerned about the possibility that the new plant might have to sit idle after these first two or three months unless Computron could win the König contract.

Company Pricing Policy

Computron had always concentrated on being the quality, blue-chip company in its segment of the digital computer industry. The company prided itself on manufacturing what it considered the best all-around computer of its kind in terms of precision, dependability, flexibility, and ease of operation.

[1] Computron's fiscal year was July 1 to June 30.

Computron did not try to sell the 1000X on the basis of price. Its price was very often higher than that for competing equipment. In spite of this, the superior quality of Computron's computers had, to date, enabled the company to compete successfully both in the United States and Europe.

The European price for the 1000X computer was normally figured as follows:

U.S. cost (includes factory cost and factory overhead)

\+ Markup of $33^1/_3$ % on cost (covers profit, R&D allowances, and selling expenses)

\+ Transportation and installation costs

\+ Import duty

Total European price

Prices calculated by this method tended to vary slightly because of country-to-country differences in tariffs and differences in components between specific computers.[2] For the König application, Zimmermann had calculated that the "normal" price for the 1000X computer would be $1,244,800:

Table A Breakdown of Computer Costs

Factory cost	$ 768,000
$33^1/_3$% markup on cost	256,000
Quoted U.S. price	$1,024,000
Import duty (15% of Quoted U.S. price)	153,600
Transportation and installation	67,200
Total "normal" price	$1,244,800

The $33^1/_3$% markup on cost was designed to provide a before-tax profit margin of 11% of the quoted U.S. price, an R&D allowance of 8%, and a selling and administrative expense allowance of 6%. The stated policy of top management was clearly against cutting this markup to obtain sales. Management felt that cutting prices "not only reduced profits, but also reflected unfavorably on the company's 'quality' image." Zimmermann knew that Computron's president was especially eager not to cut prices at this particular moment, because Computron's overall profit before taxes had been only 6% of sales in 2005–2006, compared with 17% in 2004–2005. Consequently, the president had stated that not only did he want to maintain the $33^1/_3$% markup on cost, but he was eager to raise it.

In spite of this policy, Zimmermann was aware of a few isolated instances when the markup had been dropped to the neighborhood of 25% to obtain important orders in the United States. In fact, he was aware of one instance when the markup had been cut to 20%. In the European market, however, Computron had never yet deviated from a $33^1/_3$% markup on cost.

The Customer

König & Cie., AG, was the largest manufacturer and processor of basic chemicals and chemical products in West Germany. It operated a number of chemical plants throughout the country. To

[2] Depending on the specific application, the components of the 1000X varied slightly, so each machine was somewhat different.

date it had purchased three digital computer process control systems, all from Computron. The purchase was made during 2005-2006 and represented $4,000,000 worth of business for Computron. Thus König was Computron's largest German customer and alone constituted over 80% of Computron's 2005–2006 sales to Germany.

Zimmermann felt that the primary reason König had purchased Computron systems was their proven reputation for flexibility, accuracy, and overall high quality. So far, König officials seemed well pleased with their Computron computers.

Looking ahead, Zimmermann felt that König would continue to represent more potential business than any other single German customer. He estimated that during the next year or two König would need another $4,000,000 worth of digital computer equipment.

The computer on which König was then inviting bids was to be used in training operators for a new chemical plant. The training program was to last approximately four to five years, after which the computer would either be scrapped or converted for other uses. The calculations the computer would have to perform were highly specialized and would require little machine flexibility. In the specifications published with the invitations to bid, König management had stated that it was primarily interested in dependability and a reasonable price. Machine flexibility and pinpoint accuracy were of very minor importance, because the machine was not to be used for on-line process control.

Competition

In Germany approximately nine companies were competing with Computron in the sale of medium-priced digital process control computers. Four companies accounted for 80% of sales in 2005–2006 (see **Table B**).

Table B Market Shares for Companies Selling Medium-Priced Digital Computers to the German Market, 2005–2006

Computron, Inc.	$ 4,800,000	30.0%
Ruhr Maschinenfabrik, AG	3,200,000	20.0
Elektronische Datenverarbeitungsanlagen, AG	2,000,000	12.5
Digitex, GmbH	2,800,000	17.5
Six other companies (combined)	3,200,000	20.0
Total	$16,000,000	100.0%

Zimmermann was primarily concerned with competition from the following companies:

- ***Ruhr Maschinenfabrik, AG:*** a very aggressive German company which was trying hard to expand its share of the market. Ruhr sold a medium-quality, general-purpose digital computer at a price roughly $22^1/_2$% lower than Computron charged for its 1000X computer. Because the Ruhr machine was manufactured entirely in Germany, the absence of import duty accounted for $17^1/_2$ % of this price differential. To date Ruhr had sold only general-purpose computers, but reliable trade sources indicated that it was then developing a special computer for the König bid. Ruhr's planned price for the special-purpose computer was reported to be about $872,000.

- ***Elektronische Datenverarbeitungsanlagen, AG (EDAG):*** a relatively new company which had developed a general-purpose computer of comparable quality to the Computron 1000X. Zimmermann felt that EDAG presented a real long-range threat to Computron's position as the blue chip company in the industry. To get a foothold, this firm had sold its first computer almost at cost. Since that time, however, it had undersold Computron only by the amount of the import duty to which Computron's computers were subject.

- ***Digitex, GmbH:*** a subsidiary of an American firm which had complete manufacturing facilities in Germany and produced a wide line of computer equipment. The Digitex computer that competed with the Computron 1000X was only of fair quality. Digitex often engaged in price-cutting tactics, and in the past the price of its computer had sometimes been as much as 50% lower than that of Computron's 1000X. In spite of this difference, Computron had usually competed successfully against Digitex because of technical superiority.

Zimmermann was not overly concerned about the remaining competitors; he did not consider them to be significant factors in Computron's segment of the industry.

The German Market

The total estimated German market for medium-priced digital process control computers of the type manufactured by Computron was running at about $16,000,000 per year. Zimmermann thought this could be expected to increase at an annual rate of about 25% for the next several years. For 2005-2006 he already had positive knowledge of about $5,200,000 worth of new business, broken down as follows:

Table C Breakdown of New Business

König & Cie., AG	
Frankfurt plant	$1,200,000
Düsseldorf plant	1,000,000
Mannheim plant	600,000
Central German Power Commission	1,760,000
Deutsche Autowerke	640,000
	$5,200,000

This business was in addition to the possible computer sale to König; however, none of this already known business was expected to materialize until late spring or early summer.

Deadline for bids The deadline for submission of bids to König was August 1, 2006—then less than two weeks away.