

## WHAT DOES ONE GET IN AN ACQUISITION?

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Many companies making acquisitions do not know exactly what they are getting. The purchase price is normally based on earnings, future cash flows and the benefits of syzygies (unions of two related things).

In most cases, a rigorous analysis of what the buyer actually receives is essential. After all, cash flows do not arise on their own; they come from the prudent utilization of assets, financial, physical and intellectual.

Recently a client purchased a company in the same line of business, communications equipment. The Purchase, operating since 1986, has installations in over 30 countries and offices in Nashville, TN, Britain, Germany, and Beijing. Their segment of the market is small, only about US \$720 million, growing by 2% to 3%. Sales in 1999 were: North America (32%), Europe (53%), Asia & Africa (15%).

### **Earnings Record**

Unlike the big name, Telco suppliers, Purchase's sales had been relatively static, between \$15 million and \$19 million, while profits had fluctuated as shown in the table below.

|                            | <b>\$'000</b> |               |               |               |               |
|----------------------------|---------------|---------------|---------------|---------------|---------------|
| <b>Year to February 28</b> | <b>1996</b>   | <b>1997</b>   | <b>1998</b>   | <b>1999</b>   | <b>2000</b>   |
| Sales                      | <u>19,220</u> | <u>17,150</u> | <u>15,675</u> | <u>15,380</u> | <u>18,000</u> |
| Gross Profit               | <u>8,795</u>  | <u>8,505</u>  | <u>8,000</u>  | <u>8,350</u>  | <u>9,110</u>  |
| Expenses                   |               |               |               |               |               |
| Sales                      | 1,417         | 1,205         | 1,450         | 1,260         | 1,275         |
| R&D                        | 1,608         | 1,465         | 1,145         | 1,285         | 1,530         |
| Administration             | 4,640         | 5,170         | 4,043         | 4,595         | 4,680         |
| Interest-net               | <u>180</u>    | <u>115</u>    | <u>62</u>     | <u>5</u>      | <u>5</u>      |
|                            | <u>7,845</u>  | <u>7,955</u>  | <u>6,700</u>  | <u>7,145</u>  | <u>7,490</u>  |
| Pre-tax Profit             | 950           | 550           | 1,600         | 1,205         | 1,620         |
| Income Tax                 | <u>405</u>    | <u>235</u>    | <u>680</u>    | <u>515</u>    | <u>690</u>    |
| Net Income                 | <u>545</u>    | <u>315</u>    | <u>920</u>    | <u>690</u>    | <u>930</u>    |

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Purchase was owned by management (53%) and Venture Capital firms (47%). The price was \$10,975,000, of which \$8 million was cash and \$2,975,000 in Shares of Buyer which were taken by one Venture Capital firm.

When the transaction took place in February 2000, an IPO was expected later in the year. The Price/Earnings Ratio for this transaction was 11.8 times and Goodwill of \$7,288,000 generated.

### Financial Position

The Balance Sheet of Purchase was good as shown below:

|                     |              | <b>\$'000</b> |
|---------------------|--------------|---------------|
| <b>Assets</b>       |              |               |
| Cash                | 739          | 12.4%         |
| Receivables         | 2,835        | 47.5%         |
| Inventories         | 1,940        | 32.5%         |
| Equipment-net       | <u>451</u>   | 7.6%          |
|                     | <u>5,965</u> | 100.0%        |
| <b>Liabilities</b>  |              |               |
| Bank                | 1,027        | 17.2%         |
| Payables & Accruals | 903          | 15.1%         |
| Capital Leases      | <u>348</u>   | 5.8%          |
|                     | <u>2,278</u> | 38.2%         |
| <b>Equity</b>       |              |               |
| Share Capital       | 200          | 3.4%          |
| Retained Earnings   | <u>3,487</u> | 58.5%         |
|                     | <u>3,687</u> | 61.8%         |
|                     | <u>5,965</u> | 100.0%        |

### Assignment

Management intended to write-off the In-Process R&D and rather than record Goodwill, put the actual assets acquired on the consolidated Financial Statements. Therefore, they asked us to advise them regarding:

- a) The intellectual assets represented by the Goodwill, and,
- b) An allocation of the purchase price based on the relative fair values of the financial, physical and intellectual assets.

### Intention

The intention of the acquisition was to increase market share by giving Buyer access to new geographical areas and to broaden its product range. A single item, SNOOKS, accounts for about 65% of Purchase's sales, while re-sale units represent a further 18%.

## **What Does One Get in an Acquisition?**

We determined the principal intellectual assets acquired by Buyer were:

- Long Term leases on office and R&D space;
- Sales Channels, including distributors with whom Buyer had tried to obtain a relationship;
- Brand Name "SNOOKS";
- Core Technology, mainly relating to the SNOOKS products;
- Customer Base, principally SNOOKS users;
- New Products including In-Process R&D.
- Distribution Rights from outside suppliers.
- Engineering Workforce.

### **Long Term Leases**

The long-term Leases expire in August 2017, with a remaining life of 17.5 years; they cover 12,000 sq. ft. of fully built out office space some of which is used for R&D and building of prototypes. Purchase sub-contracts all its manufacturing.

The Leases were entered into during 1992, the depths of the last recession at a net rent of \$1.60 per sq. ft. The current going rate is \$5.50 a sq. ft., giving Purchase savings of \$46,800 a year. The present value of this amount at 12% over the remaining term is \$333,263. Rounded to \$335,000 this is the Value of the Leases.

### **Sales Channels**

Another major asset of Purchase is Agreements with distributors in the US, Britain, China, France, Germany, Holland, and Poland. Both Buyer and Purchase deal with two of the three large national distributors in the United States. Individually their volume is close to minimum levels; together they easily exceed them. In other markets Purchase had been successful in obtaining national dissemination, while Buyer was usually limited to the regional level.

Total sales by Purchase in fiscal 2000 through distributors, with whom Buyer did not have a relationship, were \$5,543,000 (30.8%); at a Gross Margin of 50.6% this generated \$2,805,000 of Gross Profit. Discussions with several computer hardware clients indicate that a long-term Distribution Agreement, such as those of Purchase, is worth about one month's Gross Profit for each future year. CVS has chosen \$1,400,000 (six months' Gross Profit), or as the Value of the Sales Channels acquired.

### **Brand Name**

SNOOKS is the leading brand in many markets with a reputation as a solid, reliable, easy-to-configure, out-of-the-box product. In the year to February 29, 2000, SNOOKS' sales were \$10,637,000, more than twice those (\$4,710,000) of the second ranked, comparable product. With a gross margin of 63.0% and a pre-tax contribution of 19.0% after product development costs but

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before corporate R&D, these \$5,927,000 extra sales generate about \$645,000 a year after tax at 42.7%.

Even though the existing product design is likely to be replaced during the next five years, the SNOOKS name will continued to be used for the replacement units. The present value at 20% of the net contribution, for ten years (two product generations), is \$2,706,000 (using a factor of 4.193 times). Rounded to \$2,700,000, this is the Value of the SNOOKS Brand Name.

### Core Technology

The Core Technology relates to the SNOOKS products; the others use either acquired technology or some that are being developed.

We adopted the "relief-from-royalty" method to establish the Value for the Core Technology. Licensing rates for this type of product range from 6% to 8% of sales. The middle of the range gives about \$745,000 a year before tax, using fiscal 2000 revenues. The present value at 20% of the net amount over the expected five years' remaining economic life of the present product is \$1,275,000 (a factor of 2.99 times); this is the Value of the Core Technology.

### Customer Base

As Purchase sells through distributors and warranty requirements are slight, it has not been able to persuade many end users to register; therefore, there is no database of customers. Volumes are increasing; in the United States deliveries doubled between 1998 and fiscal 2000. Current shipments in that market are about 5,000 units a year.

From serial numbers and shipping records, management estimated that about 80,000 SNOOKS units had been sold; the average installation is estimated at 5.4 units, for a total of 14,800 customers. Using a modest \$40 each gives \$592,000; rounded to \$600,000 this forms the Value for the Customer Base.

### New Products (In-Process R&D)

When acquired, Purchase had fourteen R&D projects underway, of which six related to a new product family in the late Beta stage. At that time, \$1,322,000 had been spent on developing this product family, which was expected to generate sales as follows:

| <b>Year to February</b> | <b><u>2001</u></b> | <b><u>2002</u></b> | <b><u>2003</u></b> | <b><u>2004</u></b> |
|-------------------------|--------------------|--------------------|--------------------|--------------------|
| Revenues \$'000         | 1,250              | 2,400              | 1,600              | 1,425              |
| Gross Margin            | 46%                | 48%                | 49%                | 50%                |
| Gross Profit            | 575                | 1,152              | 784                | 713                |

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Based on estimated future R&D and marketing costs, the contribution after tax of the New Products is \$852,000, using a 25% discount rate; rounded to \$850,000 it forms the Value of the New Products including the In-Process R&D.

### **Distribution Rights**

Purchase distributes three sets of products manufactured by others; their revenues for fiscal 2000 were \$3,185,000, at a gross margin of approximately 30%. Based on transactions in Distribution Rights, we believe that in this case they are worth 4% of revenues annually and that they have a life of five years; using a 20% discount rate, gives a present value of \$381,000. Rounded to \$380,000, this forms the Value for the Distribution Rights.

### **Engineering Workforce**

The engineering team consisted of fifteen people in Britain and the United States. Our approach to valuing this organization was to establish the reproduction cost of two items: head hunter charges and pay for the time spent on the learning curve.

The four principal engineers were considered individually and the remainder in groups. Head hunter charges vary geographically; for Purchase, they were between 10% and 20% of payroll, increased to 25% for the Chief Technology Officer ("CTO"). The learning curve pay was calculated using a sum-of-the-digits approach, based on estimates of the time to obtain reasonable proficiency; this was nine months for the CTO, six months for the other principal engineers, and between three and five months for the rest of the staff.

The total of head hunter charges and learning curve pay for the Engineering Workforce is \$426,000; rounded to \$425,000, this forms the Value for the Engineering Workforce.

### **Intellectual Assets**

The following table sets out the Values of the various Intellectual Assets determined independently. Their total, \$7,965,000, exceeds the Goodwill of \$7,288,000 by \$677,000 or 8.5%. The fair values of these assets have been allocated by reducing each item by 8.5%.

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|                                   | <b>Determined<br/>Value<br/>\$'000</b> | <b>Allocated<br/>Value<br/>\$'000</b> |
|-----------------------------------|--|---------------------------------------|
| Long Term Leases                  | 335                                    | 307                                   |
| Sales Channel                     | 1,400                                  | 1,281                                 |
| Brand Name                        | 2,700                                  | 2,470                                 |
| Core Technology                   | 1,275                                  | 1,167                                 |
| Customer Base                     | 600                                    | 549                                   |
| New Products (In-<br>Process R&D) | 850                                    | 778                                   |
| Distribution Rights               | 380                                    | 348                                   |
| Engineering Workforce             | <u>425</u>                             | <u>388</u>                            |
|                                   | <u><u>7,965</u></u>                    | <u><u>7,288</u></u>                   |

Many acquisitions are considered to be failures as they do not result in an increase in the value of the shares of the combined company. The process described in this paper is a useful exercise in establishing whether the benefits of the transaction go to the shareholders of the acquirer or the target.