Valuing Technology Companies

By Richard Tumer

Valuation is not a precise science. The founders or existing share holders want to maximise the value. An investor is typically much less optimistic about the companies prospects and more acutely aware of the risks, and therefore wants to minimise the value. This is a minefield that can damage a company and moral of the team even after it is successfully completed. Years later founders can be resentful of deals that they thought underestimated the value and therefore robbed them of value.

So what is value? How can a loss making company with revenues of $9 million sell for $210 million; an idea on paper raise $10 million on a $20 million pre money valuation; whereas another company with revenues of £3 million making £0.5 million profit sells for £3 million?

Value depends upon an assessment of the future risks and potential and, in the case of a trade buyer, the strategic value and synergies that an acquisition can deliver.

Valuation Techniques

So how do these wildly different valuations come about? The answer depends upon why you are valuing a company and the techniques used. There are broadly speaking two types of approaches that are useful for valuing intellectual property based businesses: Discounted cash flow and market based approaches.

Discounted Cash Flow Approach

Conceptually all income/revenue based valuation techniques use discounting of the future as an underlying basis for coming to an assessment of the current value. The techniques vary but the assumption is that the business is worth some discounted sum of the future revenues or profit. The key assumptions are what stream is being discounted and at what rate. In practice DCF approaches are very hard to use for early stage technology companies as the projected financials are often extremely speculative and the variables determining outcomes many and various. DCF works best when applied to companies with a proven business model and a reasonable history of performance.

The venture capital method uses the following steps:
- Determine a realistic 'Proforma' forecast.
- Find Price to Earnings (P/E) ratios for comparable businesses.
- Determine a company's future value by multiplying earnings by this comparable P/E.
- Determine what % ownership is required to achieve the required ROI on the initial investment. For VCs this ROI is typically between 30% and 80% depending on risk.
- This will determine the post-money valuation.
Case study 1 – Queensgate.

At the time Queensgate was a leading supplier of embedded optical network monitoring products. The core of their optical technology was a precision tuneable filter based on nanopositioning technology. In 2000 they were acquired by SDL for $210 million consisting of initial payments of $3 million of cash and $57 million of SDL stock and contingent payments of up to $150 million - based on Queensgate’s pre-tax profits in 2000 and 2001. In calendar year 1999, Queensgate reported revenues of approximately $9 million and had about 110 employees.

The rationale for the acquisition was “to diversify our product lines by adding even more leading edge technologies,” said Donald R.Scifres, CEO and chairman of SDL, Inc. “Optical network monitoring is expected to be a critical function within future optical transmission systems.”

Case Study 2 - Icera.

Icera designs, produces and sells soft modem chipsets that deliver high performance communication engines for cellular products such as smart phones. In 2003 Icera was not much more than a twinkle in the eyes of its founders. The IP consisted of detailed descriptions on paper - there was no product, no prototype - just a clever idea. The team were highly experienced and had just left Element 14 another Silicon chip company. The money followed the team and the initial investment of £10 million from Benchmark Capital and Atlas Ventures was carried out at a pre-money valuation of £13 million. Since 2003 Icera has received over $250 million in investment and has yet to breakeven.

At the time Atlas ventures view was “We were co-lead investor in Element 14 and are delighted to be co-leading this first funding for Icera. We are confident that this team knows how to build an incredibly successful company.” Mark Evans, General Partner at Benchmark Capital added: “Icera addresses a large market with truly innovative core technology and has near-perfect market timing.”

Market Based Approaches

Why was loss making Queensgate worth $210 million? Why was Icera worth $20 million? The answer lies in market value. Which is not so much a technique and more a hunch. The buyers of Queensgate felt that it would give them a compelling edge in the market that would transform their strategy. The investors in Icera felt that they had a compelling proposition with an excellent team who had proven they could build a successful company.

A highly experienced American venture capital investor explained this approach as follows:

“we believe that we can exit for over $200 million in five years time, we think that it will cost $15 million investment to get to exit, our target rate of return is 10 times over the investment period, we think that to incentivise management requires them to have 25% therefore resolve that equation and you get a pre – investment valuation and that’s as scientific as it gets”
Just in case you are wrestling with the answer it is $5 million.

For many early stage investors investment valuation is even less scientific. Many funds in the UK have a view that all technology businesses that they are willing to invest in are worth £1 million irrespective of the technology or the market. This is not based on any assessment of exit value it is just a policy. If pushed they will offer the management team a ratchet or options package determined by achieved exit valuations that effectively give the business a higher initial valuation. In effect the approach is to say if you think it’s worth so much well let’s see what’s achieved at exit and if it is much greater than our 10 times target you can get a bigger share of the upside.

Case Study 3 – APB

APB provides property management software to the estate management sector. APB was established in 1979 and had grown steadily and by 2007 it had revenues of about £3.5 million and EBIT of about £.75m. It was sold to Yardi Inc an American based software company specialising in the property sector for £5 million. Yardi had been trying to enter the European market since 2002 and wanted to accelerate its European business and saw APB as a well established company with a first class client base as away of achieving this objective.

Factors affecting Value

The biggest factor that affects valuation of technology companies is risk: market risk; technology risk; and management risk. An investor is looking at how to minimise these risks: does the technology meet a genuine unmet need or solve a real problem or is it a technology looking for a problem to solve; is the technology protectable and does it confer defensible competitive advantage or can it be easily re-engineered; is the management up to the challenge, can they work with investors, can they grow with the business.

As well as execution risk there is commercial risk – will anyone want to buy the business when an investor wants to exit.

Maximising Value

Technology businesses seeking to maximise value need to focus as much on managing the downside as emphasising the upside. This requires building the right management team; understanding the market and the value proposition in detail; getting the pricing right; creating partnerships with other businesses which can help take the product to market and create synergies.