



TECHNOLOGY VALUATIONS – THE WHYS AND WHEREFORES AND WHY NOTS

The valuation of technology provides many challenges and imponderables. This brief synopsis is drawn from a Paper intended to provide some thought starters and critical issues for those involved in considering the valuation of Intellectual Property and intangibles. It is available by contacting our Adelaide or Melbourne offices at the numbers below. Further references can be found in our publication, *Australian Valuation Handbook*¹ [“AVH”]. AVH also provides references on a hyperlinked basis to Internet web sites on a variety of valuation issues.

A valuation of technology may be required for one or more of the following reasons:

- ranking alternative projects to allocate scarce capital resources
- making decisions whether to proceed to the next phase of development
- as part of applications for venture capital or government assistance
- measuring value creation
- structuring a part or full disposal
- determining royalty rates and equity shares in spin-offs
- reporting for internal management purposes
- compliance

The information required and its treatment is different depending on the purpose of the valuation. It is better to focus on the decision that needs to be made and how the valuation process can assist in that decision-making rather than on deriving an absolute value number.

There are a number of key areas where technology valuations differ from other financial valuations and require special consideration. They include:

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| • assumption of success | • alternative transaction structures |
| • cost to replicate | • life and timing of cashflows (inwards and outwards) |
| • project commitment | • comparable transactions |
| • competition | |
| • market dynamics | |

The quantum of data, imponderables and permutations of outcomes is often such that by going through a rigorous valuation process and attempting some quantification is in itself a benefit.

There is a need to be objective but, at the same time, avoid “paralysis by analysis”. Some of the issues are obvious, while others may not have been thought about by the project proponents. The areas to be considered when preparing a ‘base case’ valuation include, but are by no means limited to:

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| • markets to be served | • time to achieve ultimate market share |
| • size of markets | • expected market share |
| • cost to bring to market | • cost to finalise development |
| • date of entry into the market | • cost to maintain technology |
| • take up rate | • cost to develop improvements |

¹ Australian Valuation Handbook is authored by Leadenhall Australia Limited (www.leadenhall.com.au) and is distributed by the Centre for Professional Development (tel 1 800 036 186 or cpd@thomson.com.au).



In many instances only broad estimates may be available and if so, wide ranges may need to be used. The purpose of a base case is to “draw a line in the sand” so as to begin some quantification as an aid to major decision making.

In valuing technology there are two critical issues:

- be consistent with the level of risk in the discount rate
- do not use a high discount rate as a substitute for management evaluation.

In many projects, there are a number of components required to make them successful. Technology may be a small one and to attribute the whole of the value of the project to a technology can be quite misleading. A rigorous assessment must be made of each project (which incorporates the technology) and the requirements for success both technical and commercial.

In assessing the value of the technology, the key questions to be asked include:

- Is the whole of the technology owned by one organisation?
- Is it protected?
- Do other parties have any rights to this technology?
- What other items are required to commercialise the technology successfully?
- Is this technology transferable?
- Can part of the rights for technology be transferred or otherwise dealt with?
- Is it enduring? For how long? What capex is required to keep it commercially attractive?
- Will the technology give some sustainable competitive advantage?
- Is it cost effective?
- What effects will the technology have on competitors? How will they react?
- Are there competitive technologies?
- How long will it take to get to market?

The development of technology is one issue - the commercialisation and success of the commercialisation of technology is quite another. Too many times we see valuations that assume technical success and having done so, assume commercial success.

A good idea does not equal positive cashflow!

To be of most use, the technology valuation process should set out to answer specific management questions. The process should be orientated towards examining the critical issues with the derivation of the technology valuation range being a by-product. In most valuations, the valuation range is very dependent upon the assumptions made.

In early stage technology, it is critical to understand what assumptions might be made and what would change if different assumptions were made. Projects are typically committed to on a stage-by-stage basis and the question that often needs to be asked is: Is it worthwhile going to the next stage?

In measuring value creation from period to period, it is important that the value shift is not masked by changes of financial assumptions. The methodology should be consistent from period to period and value changes able to be reconciled.

The valuation of intellectual property (particularly IP which is yet to be successfully commercialised) is a complex area and one that is rewarded by using a methodical, rigorous process. However, that process is not a substitute for critical management evaluation of the attributes of the technology and its prospects. Rather, it is an input into the overall management decision making.

Each valuation has its own requirements. To obtain a copy of the complete article or for specific advice and consultation on particular issues, contact Tim Lebbon, Simon Dalgarno or Gary Cornelius in Adelaide (08 8373 4033 office@leadenhall.com.au) or Michael Mileo in our Melbourne office (03 9600 4344).